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### MAXIMUM RELIABILITY

Quality and engineering support would be meaningless if Mill-Max could not deliver your components on schedule. We work hard to ensure that the integrity of both your products and your schedule will never be compromised.

Mill-Max maintains the largest inventory of stock products in North America to ensure our ability to fill orders rapidly and consistently. The expansive scale of our manufacturing operations ensures that we can meet the requirements of custom component runs quickly, efficiently and on time.

**“We found knowledgeable people with a good understanding of quality control – if we have a problem they respond right away.”**

–Senior Quality Engineer, Energy & Water Metering Equipment

### MAXIMUM SERVICE

Call on Mill-Max and you will find that we will do everything possible to make your job easier. Our newly designed website features the most robust and easy-to-use product search engine in the industry. Responsive customer service and technical support are company hallmarks, and we specialize in quick turnaround quotes, one-hour order confirmation, on-time delivery, free samples and fast prototyping.

Put Mill-Max to the test and see how hard we will work to satisfy your needs. Mill-Max products are sold directly through our sales representative organizations as well as a network of 25 authorized distributors in the U.S. and throughout the world. Maximum satisfaction: it is both our policy and our promise.

**“When they make a promise, they keep that promise... when they say they will deliver, I know I can count on it.”**

–Senior Purchasing Specialist, CATV/Broadband Equipment Manufacturer



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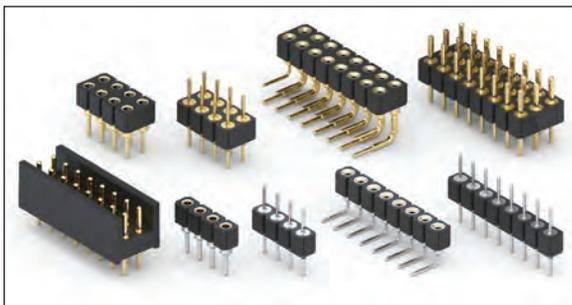
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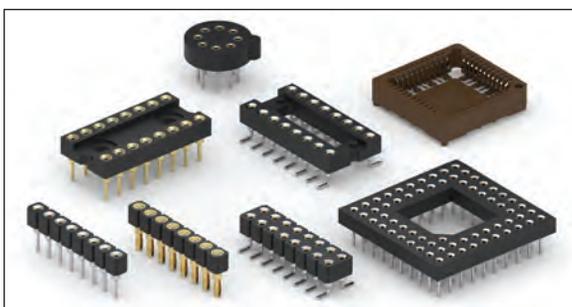
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# SPRING-LOADED CONNECTORS





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**MILL-MAX SPRING-LOADED CONNECTORS ARE IDEAL FOR A WIDE RANGE OF APPLICATIONS**, from portable data acquisition units and mobile communication to medical and military equipment applications. Their unique design can be the perfect solution for many situations where establishing an electrical path between mating points is a challenge, including problematic vibratory environments.

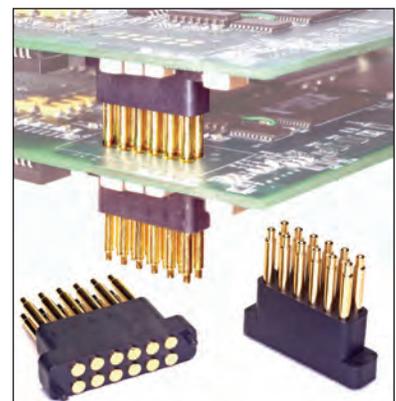
When strategically placed within an assembly and utilized correctly (shielded from over compression and direct side load forces,) spring-loaded connectors provide a reliable connection exceeding a million cycles.

**SOME TYPICAL APPLICATIONS INCLUDE:**

- The internal battery connection in portable instruments, or as the external battery connection for charging these instruments (docking stations).
- As a method for stacking printed circuit boards in an assembly. Utilizing spring pin connectors is a convenient approach to creating mezzanine-tiered board modules that can be assembled and disassembled quickly.
- Blind-mating applications: The spring pin piston need only make contact with its mating surface. This is typically a land or pad that is larger than the plunger diameter. In situations where the assembly process doesn't allow for visibility, spring pins are the optimum choice.

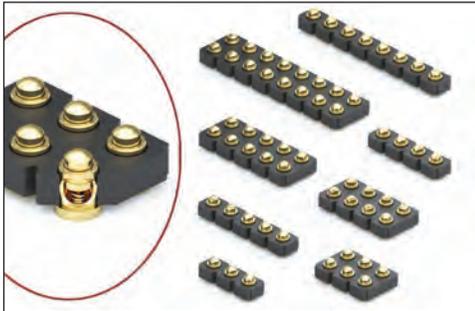
**MILL-MAX SPRING-LOADED CONNECTORS CAN MATE TO THE FOLLOWING SURFACES:**

- A conductive input/output pad found on the instrument pack itself.
- A gold-plated land on a circuit board. A hard gold over nickel-plated surface is recommended for the mating surface. This is the same as would be used for the printed circuit fingers associated with card edge connectors.
- Individual Mill-Max gold-plated nail head pins which can be soldered to the mating circuit board to serve as targets.
- Mill-Max Target Connectors which provide a large, flat gold-plated circuit path to the board.



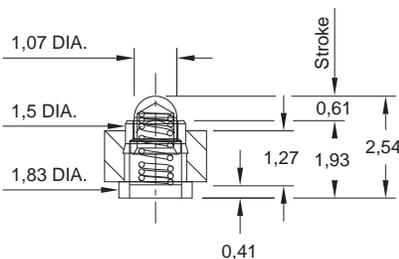
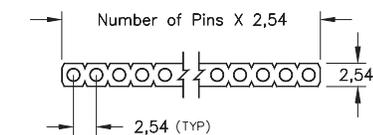
# SPRING-LOADED CONNECTORS

## SERIES 815 & 817 • 2,54 GRID SURFACE MOUNT, ULTRA LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

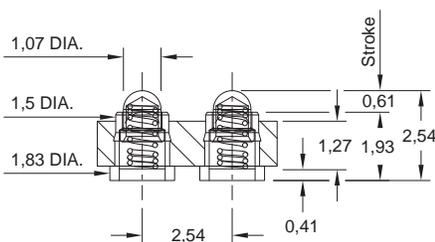
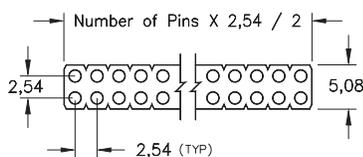


- Modular contacts for use on 2,54 grid, available in a height of 2,54, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,3 mid. stroke and a 0,61 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 815 & 817 series contact strips are designed for manual placement onto a 2,08 Ø solder pad prior to reflow soldering

### SINGLE ROW Series 815



### DOUBLE ROW Series 817



## ORDERING INFORMATION

### Single Row Series 815

815-22-0XX-30-001101

Specify number of contacts 01-32

For 815 and 817 Tape & Reel packaging, see page 12.1

### Double Row Series 817

817-22-0XX-30-001101

Specify number of contacts 04-72

For 815 and 817 Tape & Reel packaging, see page 12.1

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51 µm gold over 2,54 µm nickel  
 Spring: Beryllium copper-plated 0,25 µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,3): 60 grams  
 Durability: Up to 1,000,000 cycles  
 Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins),  
 For higher pin counts, contact Technical Support

### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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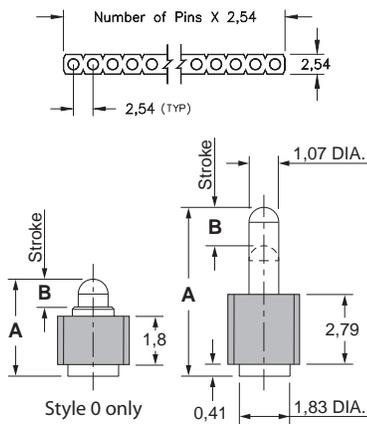
# SPRING-LOADED CONNECTORS

## SERIES 811 & 813 • 2,54 GRID SURFACE MOUNT, LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS



- Modular contacts for use on 2,54 grid, available in five heights from 3,48 to 5,99, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the assembly
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 811 & 813 series, contact styles 1 through 4, are available on 32mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12 for strip lengths available and ordering information

### SINGLE ROW Series 811



## ORDERING INFORMATION

### Single Row Series 811

811-22-0XX-30-00X101  
 Specify number of contacts 01-64      Specify contact style 0-4

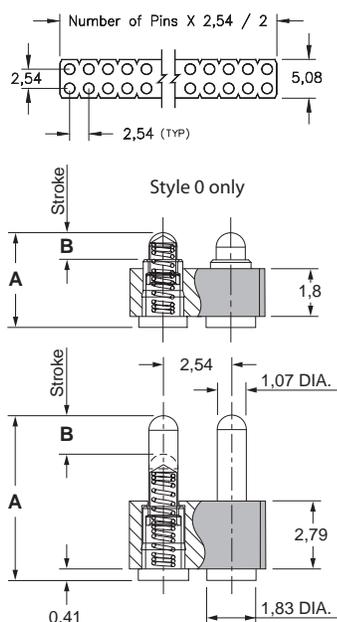
### Double Row Series 813

813-22-0XX-30-00X101  
 Specify number of contacts 04-72      Specify contact style 0-4

For 811 and 813 Tape & Reel packaging, see page 12

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
0	3,48	0,99
1	4,50	1,14
2	5,0	1,39
3	5,51	1,39
4	5,99	1,39

### DOUBLE ROW Series 813



### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51 μm gold over 2,54 μm nickel  
 Spring: Beryllium copper-plated 0,25 μm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A): 25 grams  
 Spring force @ mid stroke (B/2): 60 grams  
 Durability: Up to 1,000,000 cycles  
 Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins),  
 For higher pin counts, contact Technical Support

#### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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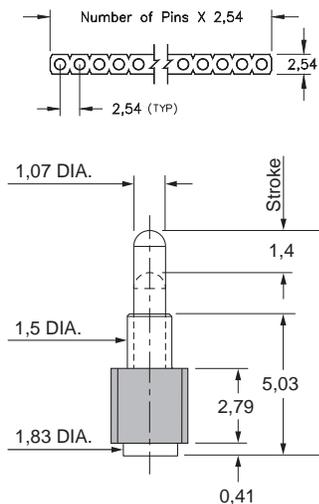
# SPRING-LOADED CONNECTORS

## SERIES 812 & 814 • 2,54 GRID SURFACE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS

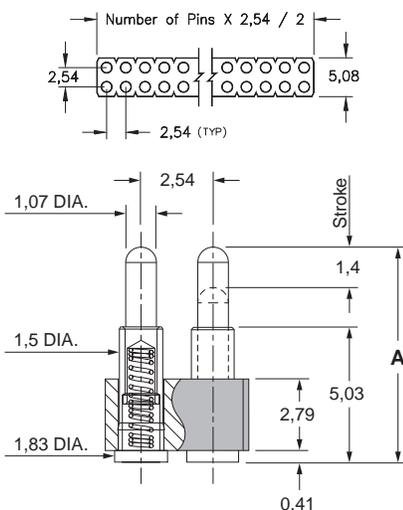


- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Extended body provides greater bearing surface for increased strength & plunger protection
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series, contact styles 0 through 9, are available on 32mm or 44mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12 for strip lengths available and ordering information

### SINGLE ROW Series 812



### DOUBLE ROW Series 814



## ORDERING INFORMATION

### Single Row Series 812

812-22-0XX-30-00X101

Specify number of contacts 02-64

Specify contact style 0-9

### Double Row Series 814

814-22-0XX-30-00X101

Specify number of contacts 04-72

Specify contact style 0-9

For 812 and 814 Tape & Reel packaging, see page 12

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	6,48	5	8,89
1	6,99	6	9,4
2	7,49	7	9,91
3	8,0	8	10,41
4	8,51	9	10,92

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Beryllium copper-plated 10µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A): 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 1,000,000 cycles  
 Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins),  
 For higher pin counts, contact Technical Support

#### Electrical:

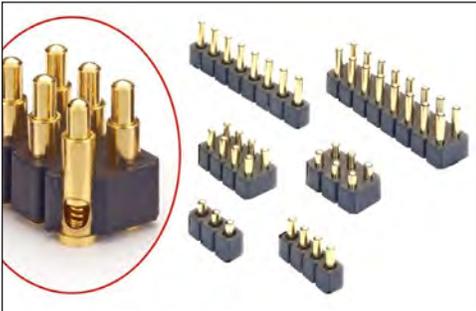
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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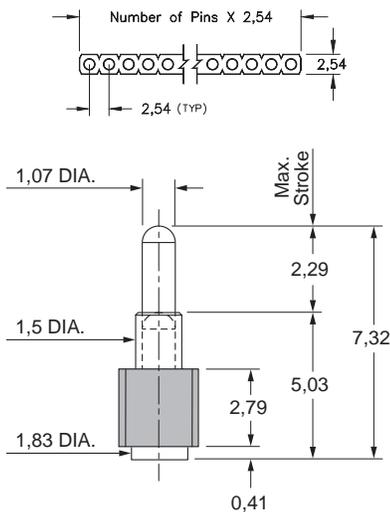
# SPRING-LOADED CONNECTORS

## SERIES 819 & 820 • 2,54 GRID SURFACE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

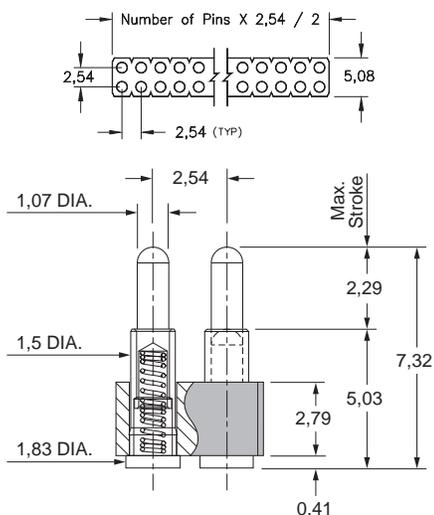


- Modular contacts for use on 2,54 grid, available in a height of 7,32, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 819 & 820 series contact strips are designed for placement onto a Ø 2,08 solder pad prior to reflow soldering
- Both 819 & 820 series, are available on carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12.1 for strip lengths available and ordering information

### SINGLE ROW Series 819



### DOUBLE ROW Series 820



## ORDERING INFORMATION

### Single Row Series 819

819-22-0XX-30-001101

Specify number of contacts 01-64

For 819 and 820 Tape & Reel packaging, see page 12.1

### Double Row Series 820

820-22-0XX-30-001101

Specify number of contacts 04-72

For 819 and 820 Tape & Reel packaging, see page 12.1

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 0,25µm nickel  
 Spring: Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (1,14): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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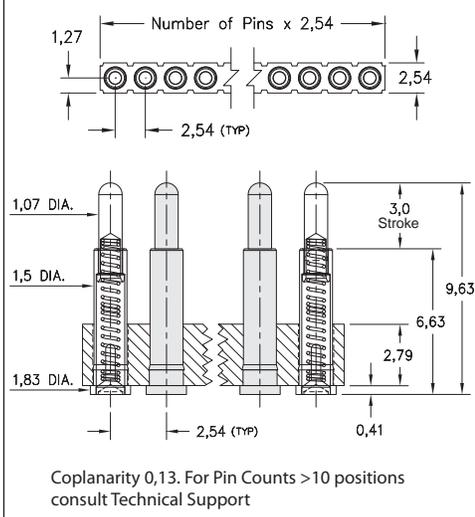
# SPRING-LOADED CONNECTORS

## SERIES 837 & 839 • 2,54 GRID SURFACE MOUNT, 3MM MAX. STROKE • SINGLE AND DOUBLE ROW STRIPS

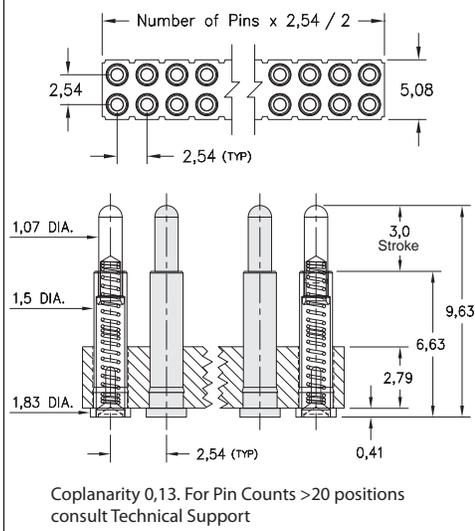


- Modular contacts for use on 2,54 grid, available in single and double row contact strips with recommended rated travel of 0,76 - 2,54 and max. stroke of 3,0 +0/-0,25
- Precision-machined piston / base and gold-plated components
- Extended body provides greater bearing surface for increased strength & plunger protection
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for SMT soldering processes
- Both 837 & 839 series, are available on 44mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481
- 837 & 839 series contact strips are designed for manual or automatic placement onto 2,08 Ø solder pads

### SINGLE ROW Series 837



### DOUBLE ROW Series 839



## ORDERING INFORMATION

### Series 837 (Bulk Packaged)

837-22-0XX-30-001101

Specify number of contacts 01-64

### Series 837 (Tape & Reel Packaged, 200 parts per reel)

837-22-0XX-30-001191

Specify number of contacts 02-12

### Series 839 (Bulk Packaged)

839-22-0XX-30-001101

Specify number of contacts 04-72

### Series 839 (Tape & Reel Packaged, 200 parts per reel)

839-22-0XX-30-001191

Specify number of contacts 04-24

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51 µm gold over 2,54 µm nickel  
 Spring: Stainless Steel-plated 0,25 µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (1,5): 85 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

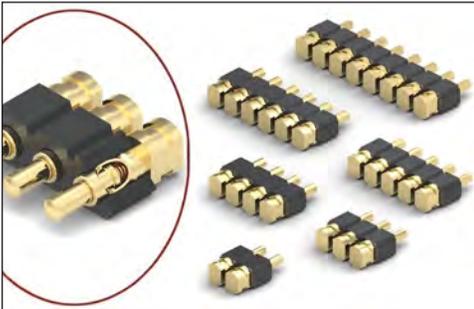
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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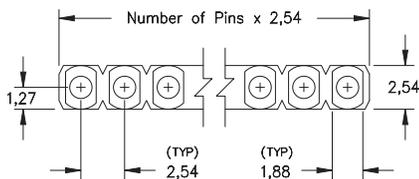
# SPRING-LOADED CONNECTORS

## SERIES 810 • 2,54 GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS

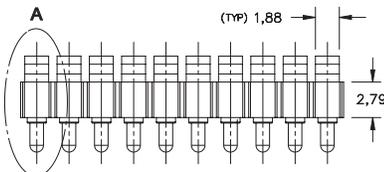


- Modular contacts for use on 2,54 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Ideal for daisy chaining of P.C.B.'s when mated with right angle target connectors (series 399...10-008) or for mating boards in a perpendicular orientation
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke & 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 810 series contact strips are designed for manual placement onto solder pads

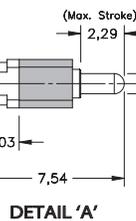
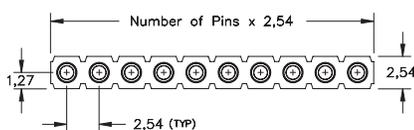
### SINGLE ROW Series 810



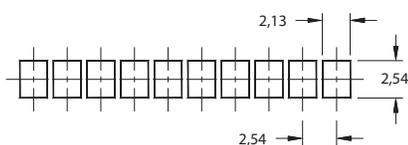
### TOP VIEW



### FRONT VIEW



### Suggested P.C.B. FOOTPRINT



Coplanarity 0,13. For Pin Counts >10 positions consult Technical Support

## ORDERING INFORMATION

### Single Row Series 810

810-22-0XX-40-001101

Specify number of contacts 01-10

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (1,14): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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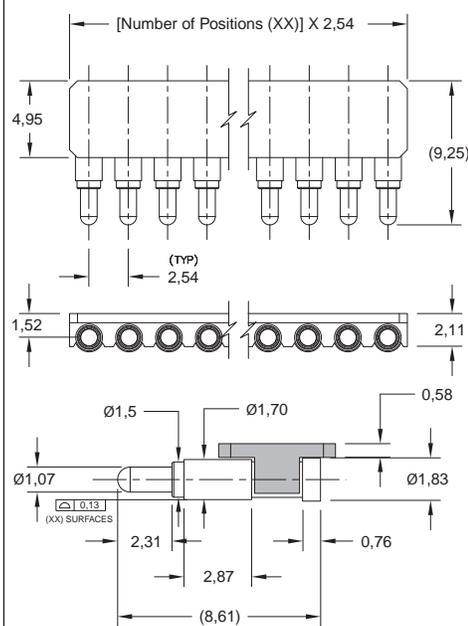
# SPRING-LOADED CONNECTORS

## SERIES 810 • 2,54 GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS

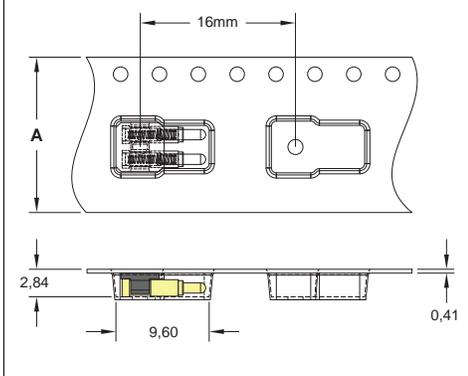


- Modular contacts for use on 2,54 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Ideal for daisy chaining of P.C.B.'s when mated with horizontal surface mount target connectors series 319-10-1XX-40-080001 or for mating boards in a perpendicular orientation
- Pistons have a 1,14 mid. stroke & 2,29 max. stroke
- High temperature thermoplastic insulators are suitable for surface mount processes
- The 810 series are packaged on tape & reel - 16, 24, 32 or 44 mm wide x 16 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D

### Series 810 Single Row



### Series 810 (Tape Pocket Details)



## ORDERING INFORMATION

### Series 810 (Tape & Reel Packaged)

810-22-0XX-40-005191

Specify number of contacts 02-10

Number of Contacts	Tape Width Size (A)	Quantity per Reel
2	16mm	1,450
3	16mm	1,450
4	24mm	1,450
5	24mm	1,450
6	24mm	1,450
7	32mm	1,450
8	32mm	1,450
9	44mm	1,450
10	44mm	1,450

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu\text{m}$  gold over 2,54  $\mu\text{m}$  nickel  
 Spring (Contact style 2-10): Beryllium copper-plated 0,25  $\mu\text{m}$  gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (Contact style 2-10): 25 grams  
 Spring force @ mid stroke (Contact style 2-10): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

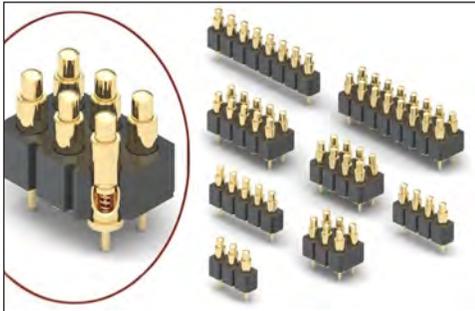
Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.

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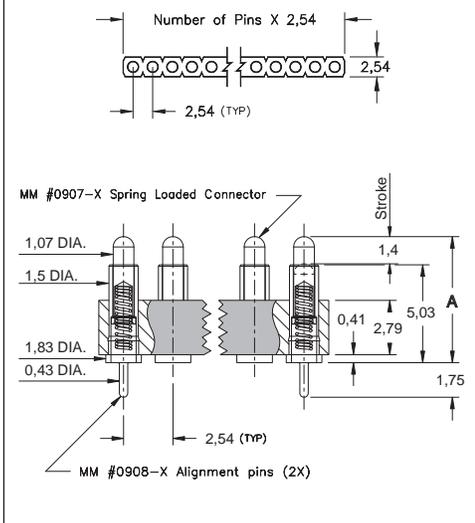
# SPRING-LOADED CONNECTORS

## SERIES 812 & 814 • 2,54 GRID SURFACE MOUNT WITH ALIGNMENT PINS • SINGLE AND DOUBLE ROW STRIPS

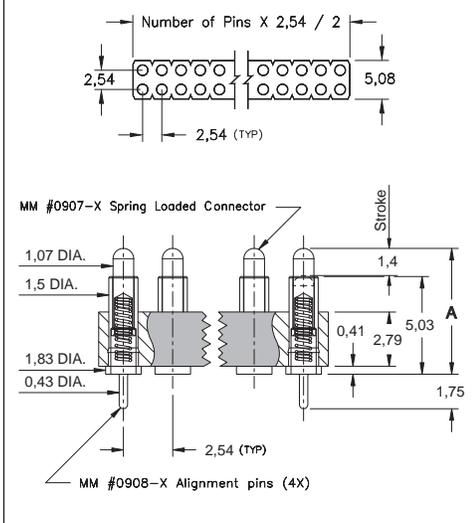


- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series contact strips are designed for manual placement,  $\varnothing 0,56 \pm 0,08$  plated through-holes in the circuit board are required for the alignment pins prior to intrusive reflow soldering

### SINGLE ROW Series 812



### DOUBLE ROW Series 814



## ORDERING INFORMATION

### Single Row Series 812...01X101

812-22-0XX-30-01X101  
 Specify number of contacts 03-64      Specify contact style 0-9

### Double Row Series 814...01X101

814-22-0XX-30-01X101  
 Specify number of contacts 06-72      Specify contact style 0-9

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	6,48	5	8,89
1	6,99	6	9,4
2	7,49	7	9,91
3	8,0	8	10,41
4	8,51	9	10,92

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51 $\mu$ m gold over 2,54 $\mu$ m nickel  
 Spring: Beryllium copper-plated 0,25 $\mu$ m gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height (A): 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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# SPRING-LOADED CONNECTORS

## SERIES 811, 812, 813, 814 • 2,54 GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

### Ordering Information for Series 811/812/813/814 in Carrier Tape

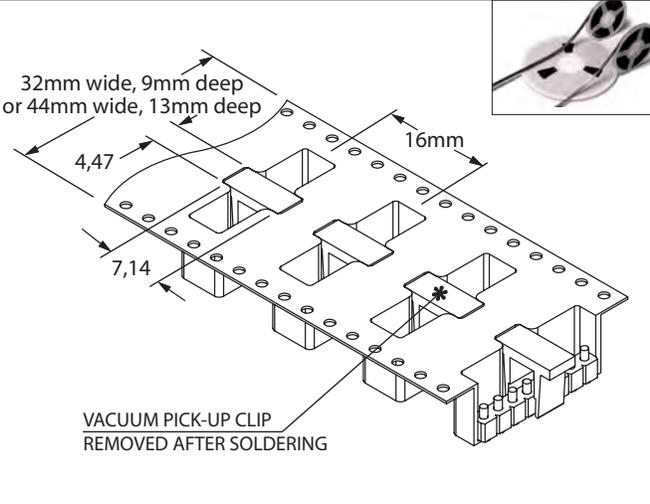
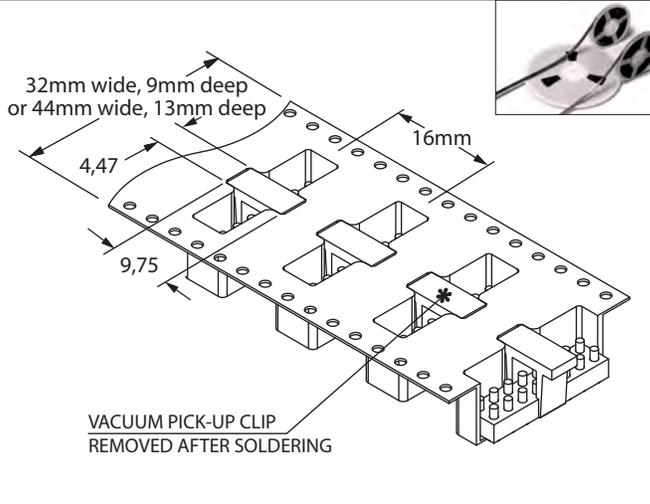
Single Row Series 811	Double Row Series 813
<p>811-22-0XX-30-00X191</p> <p>Specify contact style 0-4 Specify number of contacts 02-08 (32mm wide tape, 400 parts per 330mm reel)</p>	<p>813-22-0XX-30-00X191</p> <p>Specify contact style 0-4 Specify number of contacts 04-16 (32mm wide tape, 400 parts per 330mm reel)</p>
Single Row Series 811	Double Row Series 813
<p>811-22-0XX-30-00X191</p> <p>Specify contact style 1-4 Specify number of contacts 09-12 (44mm wide tape, 200 parts per 330mm reel)</p>	<p>813-22-0XX-30-00X191</p> <p>Specify contact style 1-4 Specify number of contacts 18-24 (44mm wide tape, 200 parts per 330mm reel)</p>
Single Row Series 812	Double Row Series 814
<p>812-22-0XX-30-00X191</p> <p>Specify contact style 0-2 Specify number of contacts 02-08 (32mm wide tape, 400 parts per 330mm reel)</p>	<p>814-22-0XX-30-00X191</p> <p>Specify contact style 0-2 Specify number of contacts 04-16 (32mm wide tape, 400 parts per 330mm reel)</p>
Single Row Series 812	Double Row Series 814
<p>812-22-0XX-30-00X191</p> <p>Specify contact style 0-2 Specify number of contacts 09-12 (44mm wide tape, 200 parts per 330mm reel)</p>	<p>814-22-0XX-30-00X191</p> <p>Specify contact style 0-2 Specify number of contacts 18-24 (44mm wide tape, 200 parts per 330mm reel)</p>
Single Row Series 812	Double Row Series 814
<p>812-22-0XX-30-00X191</p> <p>Specify contact style 3-9 Specify number of contacts 02-12 (44mm wide tape, 200 parts per 330mm reel)</p>	<p>814-22-0XX-30-00X191</p> <p>Specify contact style 3-9 Specify number of contacts 04-24 (44mm wide tape, 200 parts per 330mm reel)</p>
<p>VACUUM PICK-UP CLIP REMOVED AFTER SOLDERING</p>	<p>VACUUM PICK-UP CLIP REMOVED AFTER SOLDERING</p>



# SPRING-LOADED CONNECTORS

## SERIES 815, 817, 819, 820 • 2,54 GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

### Ordering Information for Series 815/817/819/820 in Carrier Tape

Single Row Series 815	Double Row Series 817
<p style="text-align: center;">815-22-0XX-30-001191</p> <p>Specify number of pins <span style="margin-left: 100px;">↑</span> 02-10</p> <p>( 44mm wide tape, 910 parts per 330mm reel )</p>	<p style="text-align: center;">817-22-0XX-30-001191</p> <p>Specify number of pins <span style="margin-left: 100px;">↑</span> 04-20</p> <p>( 44mm wide tape, 680 parts per 330mm reel )</p>
Single Row Series 819	Double Row Series 820
<p style="text-align: center;">819-22-0XX-30-001191</p> <p>Specify number of pins <span style="margin-left: 100px;">↑</span> 02-08</p> <p>( 32mm wide tape, 400 parts per 330mm reel )</p>	<p style="text-align: center;">820-22-0XX-30-001191</p> <p>Specify number of pins <span style="margin-left: 100px;">↑</span> 04-16</p> <p>( 32mm wide tape, 400 parts per 330mm reel )</p>
Single Row Series 819	Double Row Series 820
<p style="text-align: center;">819-22-0XX-30-001191</p> <p>Specify number of pins <span style="margin-left: 100px;">↑</span> 09-12</p> <p>( 44mm wide tape, 200 parts per 330mm reel )</p>	<p style="text-align: center;">820-22-0XX-30-001191</p> <p>Specify number of pins <span style="margin-left: 100px;">↑</span> 18-24</p> <p>( 44mm wide tape, 200 parts per 330mm reel )</p>
 <p style="text-align: center;">32mm wide, 9mm deep or 44mm wide, 13mm deep</p> <p style="text-align: center;">4,47</p> <p style="text-align: center;">7,14</p> <p style="text-align: center;">16mm</p> <p style="text-align: center;">VACUUM PICK-UP CLIP REMOVED AFTER SOLDERING</p>	 <p style="text-align: center;">32mm wide, 9mm deep or 44mm wide, 13mm deep</p> <p style="text-align: center;">4,47</p> <p style="text-align: center;">9,75</p> <p style="text-align: center;">16mm</p> <p style="text-align: center;">VACUUM PICK-UP CLIP REMOVED AFTER SOLDERING</p>

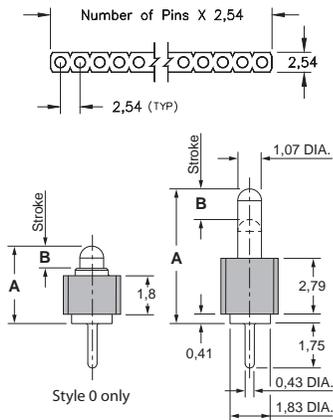
# SPRING-LOADED CONNECTORS

## SERIES 821 & 823 • 2,54 GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

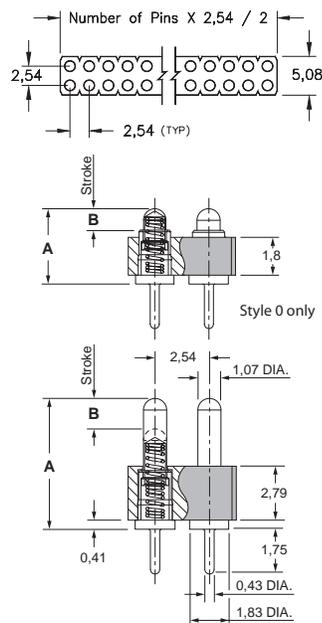


- Modular contacts for use on 2,54 grid, available in five heights from 3,48 to 5,99, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the assembly
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 821 & 823 series contact strips are designed for manual placement into  $\varnothing 0,56 \pm 0,08$  plated through-holes in the circuit board prior to hand, wave or reflow soldering

### SINGLE ROW Series 821



### DOUBLE ROW Series 823



## ORDERING INFORMATION

### Single Row Series 821

821-22-0XX-10-00X101

Specify number of contacts 02-64      Specify contact style 0-4

### Double Row Series 823

823-22-0XX-10-00X101

Specify number of contacts 04-72      Specify contact style 0-4

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
0	3,48	0,99
1	4,50	1,14
2	5,0	1,39
3	5,51	1,39
4	5,99	1,39

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu\text{m}$  gold over 2,54  $\mu\text{m}$  nickel  
 Spring: Beryllium copper-plated 0,25  $\mu\text{m}$  gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A): 25 grams  
 Spring force @ mid stroke (B/2): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

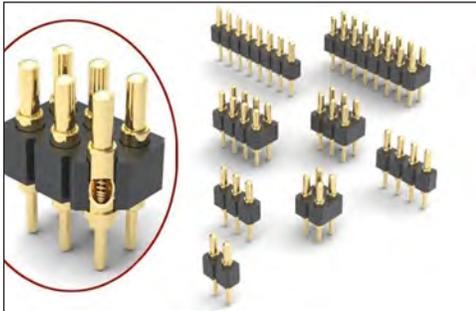
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

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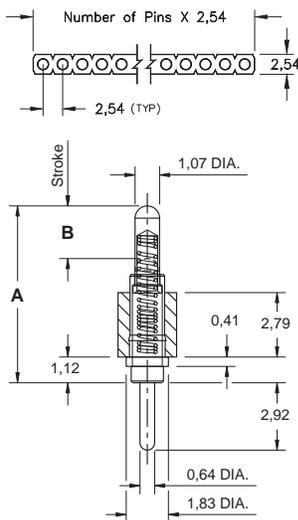
# SPRING-LOADED CONNECTORS

## SERIES 825 & 827 • 2,54 GRID THROUGH-HOLE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

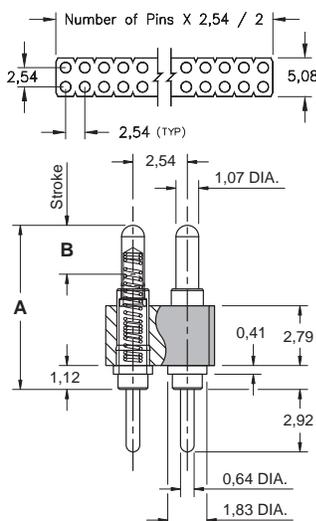


- Modular contacts for use on 2,54 grid, available in four heights from 7,67 to 9,96, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 825 & 827 series contact strips are designed for manual placement into  $\varnothing 0,76 \pm 0,08$  plated through-holes in the circuit board prior to hand, wave or reflow soldering

### SINGLE ROW Series 825



### DOUBLE ROW Series 827



## ORDERING INFORMATION

### Single Row Series 825

825-22-0XX-10-00X101  
 Specify number of contacts 02-64      Specify contact style 1-4

### Double Row Series 827

827-22-0XX-10-00X101  
 Specify number of contacts 04-72      Specify contact style 1-4

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
1	7,67	2,29
2	8,43	2,29
3	9,19	2,29
4	9,96	2,29

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51 $\mu$ m gold over 2,54 $\mu$ m nickel  
 Spring: Beryllium copper-plated 0,25 $\mu$ m gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A): 25 grams  
 Spring force @ mid stroke (B/2): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

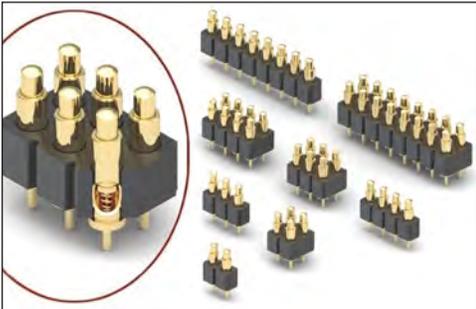
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS - 2  
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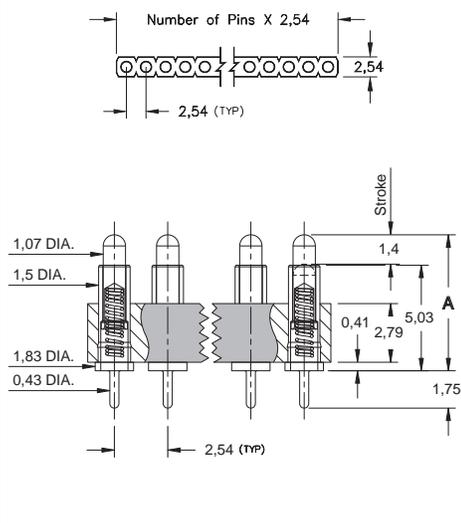
# SPRING-LOADED CONNECTORS

## SERIES 816 & 818 • 2,54 GRID THROUGH-HOLE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS



- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 816 & 818 series contact strips are designed for manual placement into  $\varnothing 0,58 \pm 0,08$  plated through-holes in the circuit board prior to intrusive reflow soldering

### SINGLE ROW Series 816...00X101



## ORDERING INFORMATION

### Single Row Series 816...00X101

816-22-0XX-10-00X101

Specify number of contacts 02-64      Specify contact style 0-9

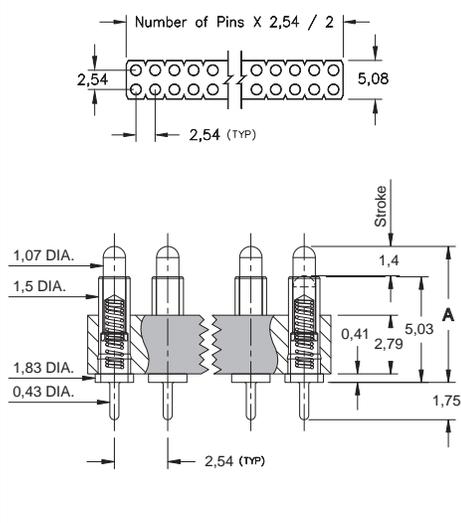
### Double Row Series 818...00X101

818-22-0XX-10-00X101

Specify number of contacts 04-72      Specify contact style 0-9

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	6,48	5	8,89
1	6,99	6	9,4
2	7,49	7	9,91
3	8,0	8	10,41
4	8,51	9	10,92

### DOUBLE ROW Series 818...00X101



### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu\text{m}$ , gold over 2,54  $\mu\text{m}$  nickel  
 Spring: Beryllium copper-plated 0,25  $\mu\text{m}$  gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A): 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

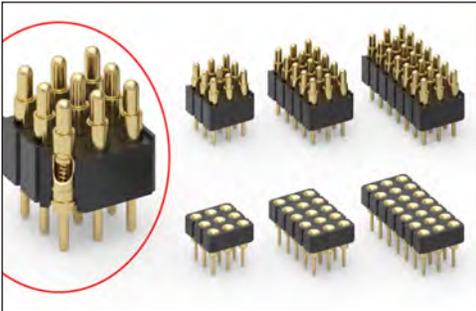
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU



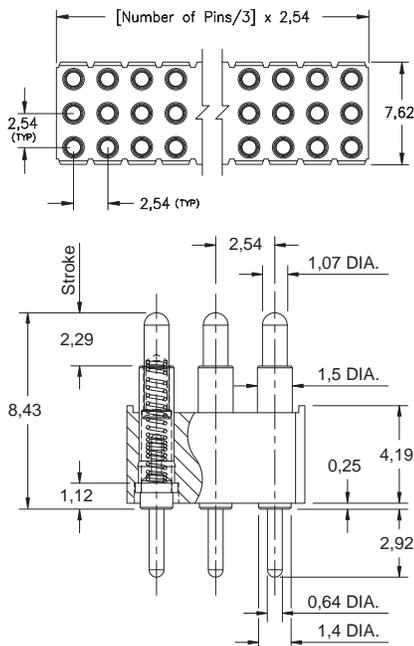
# SPRING-LOADED CONNECTORS

## SERIES 804 & 805 • 2,54 GRID THROUGH-HOLE MOUNT • LONG STROKE TRIPLE ROW STRIPS AND MATING TARGET CONNECTORS

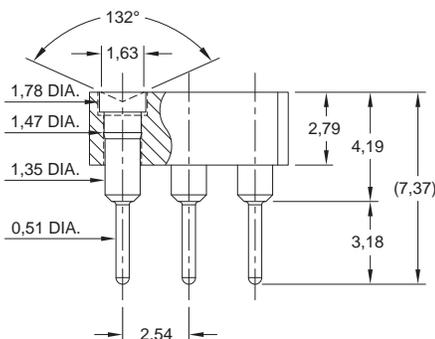


- Modular contacts for use on 2,54 grid, supplied in triple row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Spring pins have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- 804 & 805 series High temperature thermoplastic insulators are suitable for wave and reflow processes
- 804 series contact strips are designed for manual placement into  $\varnothing 0,89 \pm 0,08$  plated through-holes in the circuit board prior to hand, wave or reflow soldering
- 805 series Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. This series is offered with a concave face for making contact with our standard 1,07 dia. spring pin plungers

### TRIPLE ROW Series 804



### TRIPLE ROW Series 805



## ORDERING INFORMATION

### Triple Row Series 804

804-22-0XX-10-004101

Specify number of contacts 09-96

### Triple Row Mating Target Series 805

805-10-0XX-00-006000

Specify number of contacts 09-96

### Technical Specifications for 804 Series

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu$ m gold over 2,54  $\mu$ m nickel

Spring: Beryllium copper-plated 0,25  $\mu$ m gold

Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height: 25 grams

Spring force @ mid stroke (1,14): 60 grams

Durability: Up to 1,000,000 cycles

#### Electrical:

Voltage rating: 100Vrms/150Vdc

Current rating: 2A (continuous), 3A (peak) per contact

Contact resistance: 20m $\Omega$  max.

Insulation resistance: 10,000M $\Omega$  min.

Dielectric strength: 700Vrms min.

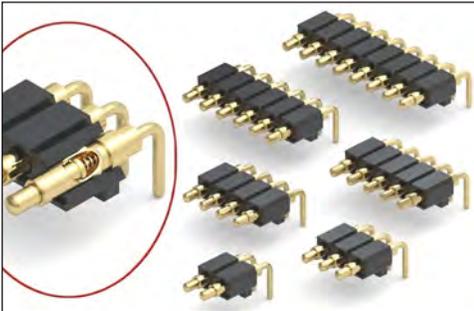
Capacitance: 1pF max.

RoHS-2  
2011/65/EU



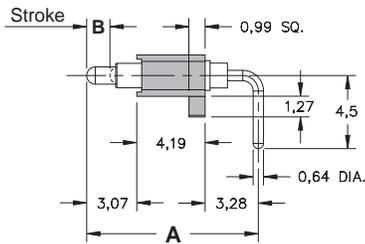
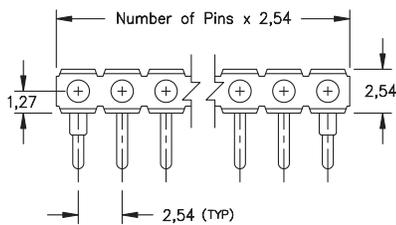
# SPRING-LOADED CONNECTORS

## SERIES 829 • 2,54 GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS

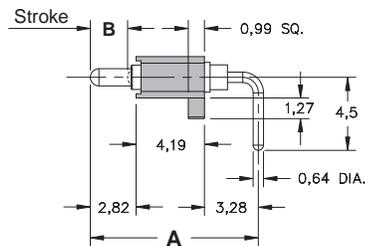


- Modular contacts for use on 2,54 grid. Supplied in single row strips with mounting pegs for support
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- 829 series contact strips are designed for manual placement into  $\varnothing 0,81 \pm 0,08$  plated through-holes in the circuit board prior to wave or reflow soldering

### SINGLE ROW Series 829

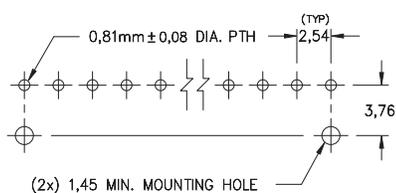


Contact style 1 only



Contact style 2 only

### Suggested P.C.B Footprint



## ORDERING INFORMATION

### Single Row Series 829

829-22-0XX-20-00X101

Specify number of contacts 01-20      Specify contact style 1 or 2

CONTACT STYLE	INITIAL LENGTH A	MAX. STROKE B
1	10,54	1,4
2	10,31	2,3

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu\text{m}$  gold over 2,54  $\mu\text{m}$  nickel  
 Spring: Beryllium copper-plated 0,25  $\mu\text{m}$  gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial length (A): 25 grams  
 Spring force @ mid stroke (B/2): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

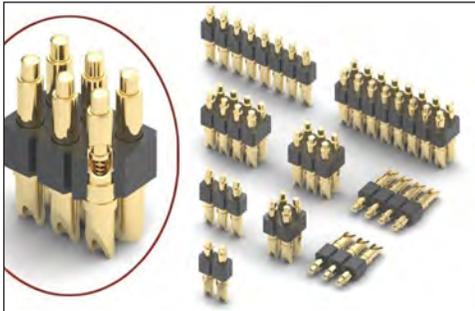
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU



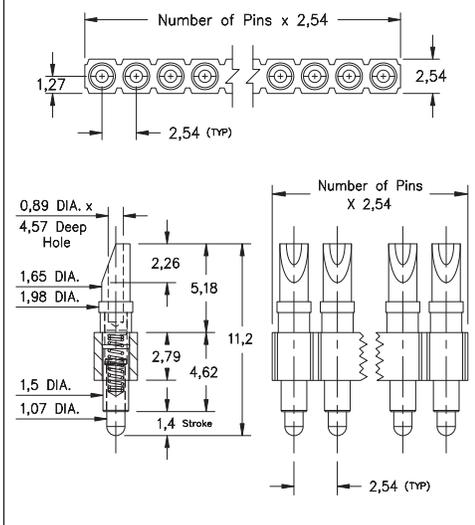
# SPRING-LOADED CONNECTORS

## SERIES 824 & 826 • 2,54 GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

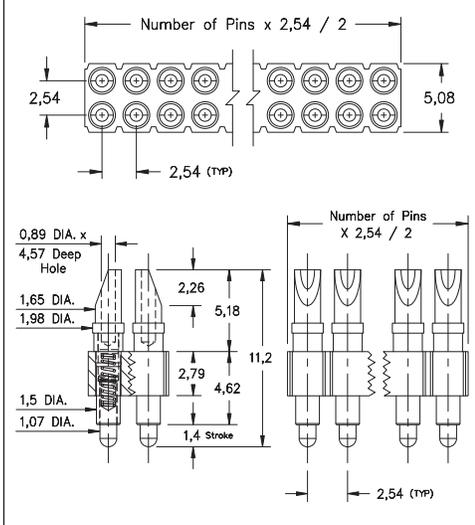


- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic
- Both 824 & 826 series strips have spring pins with wire termination soldercups. The soldercups are aligned to provide easy access for soldering up to size 22 AWG wires

### SINGLE ROW Series 824



### DOUBLE ROW Series 826



## ORDERING INFORMATION

### Single Row Series 824

824-22-0XX-00-001000

Specify number of contacts 01-64

### Double Row Series 826

826-22-0XX-00-001000

Specify number of contacts 04-72

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU



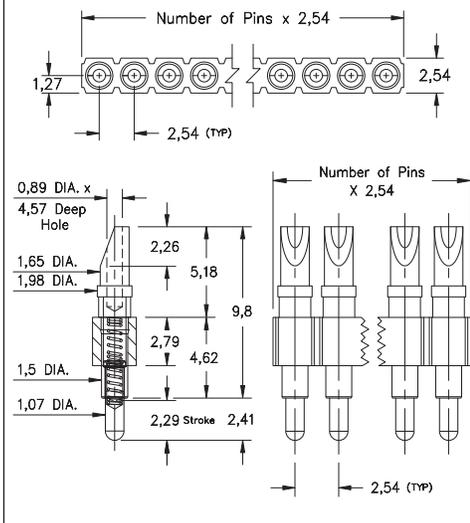
# SPRING-LOADED CONNECTORS

## SERIES 824 & 826 • 2,54 GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

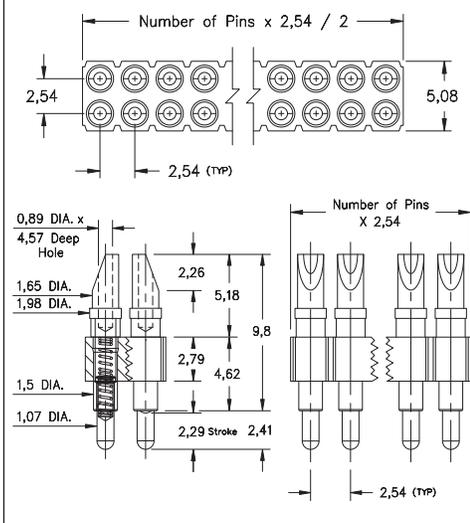


- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic
- Both 824 & 826 series strips have spring pins with wire termination soldercups. The soldercups are aligned to provide easy access for soldering up to size 24 AWG wires

### SINGLE ROW Series 824



### DOUBLE ROW Series 826



## ORDERING INFORMATION

### Single Row Series 824

824-22-0XX-00-005000

Specify number of contacts 01-64

### Double Row Series 826

826-22-0XX-00-005000

Specify number of contacts 02-72

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (1,14): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

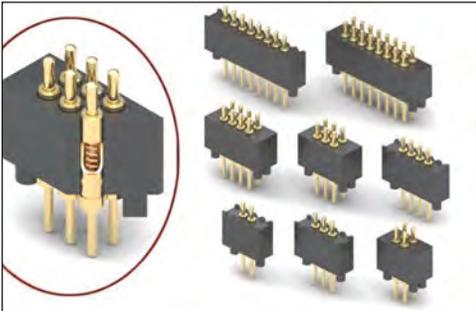
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS - 2  
2011/65/EU



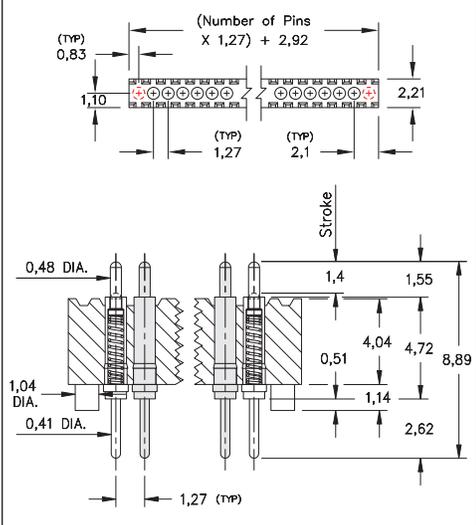
# SPRING-LOADED CONNECTORS

## SERIES 854 & 855 • 1,27 GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

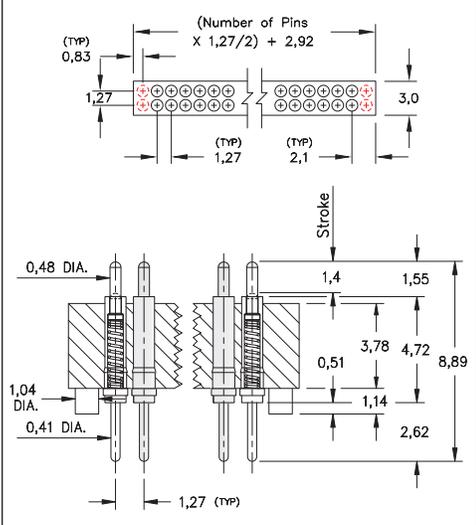


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 854 & 855 series contact strips are designed for manual placement into  $\varnothing 0,58 \pm 0,08$  plated through-holes in the circuit board prior to hand, wave or reflow soldering

### SINGLE ROW Series 854



### DOUBLE ROW Series 855



## ORDERING INFORMATION

### Single Row Series 854

854-22-0XX-10-001101

Specify number of contacts 02-20

### Double Row Series 855

855-22-0XX-10-001101

Specify number of contacts 04-40

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu\text{m}$  gold over 2,54  $\mu\text{m}$  nickel  
 Spring: Beryllium copper-plated 0,25  $\mu\text{m}$  gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 100,000 cycles

### Electrical:

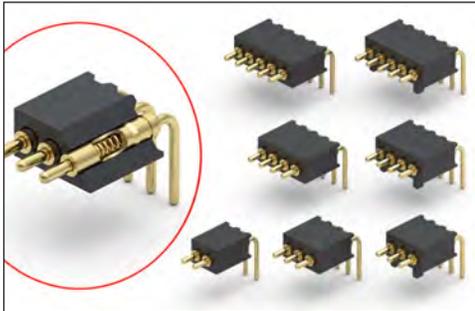
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU



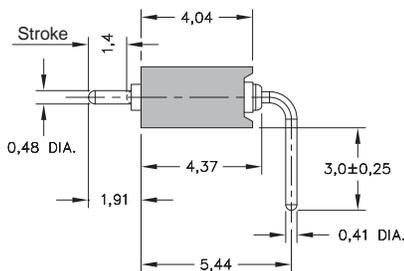
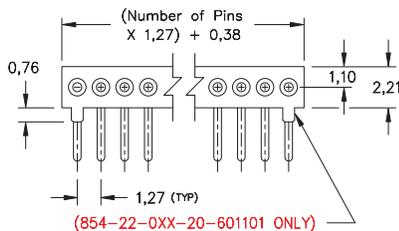
# SPRING-LOADED CONNECTORS

## SERIES 854 • 1,27 GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS

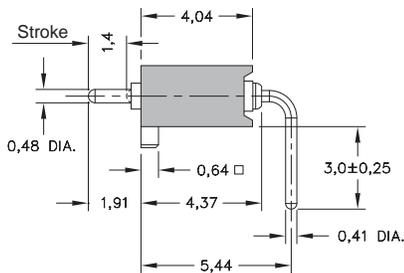


- Modular contacts for use on 1,27 grid. Supplied in single row strips with or without mounting pegs
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow soldering processes
- 854 series contact strips are designed for through-hole mounting in the circuit board

### SINGLE ROW Series 854

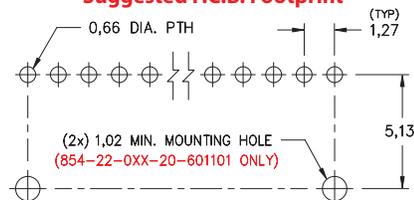


### 854 Series without Mounting Pegs



### 854 Series with Mounting Pegs

### Suggested P.C.B. Footprint



## ORDERING INFORMATION

### Single Row Series 854

854-22-0XX-20-001101

Specify number of contacts 01-20

### Single Row with Mounting Pegs Series 854

854-22-0XX-20-601101

Specify number of contacts 01-20

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 100,000 cycles

### Electrical:

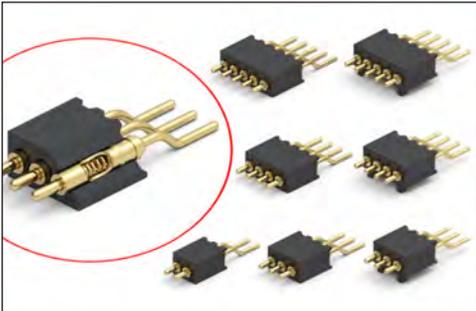
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU



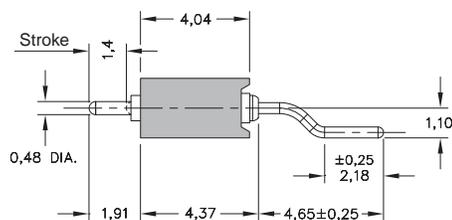
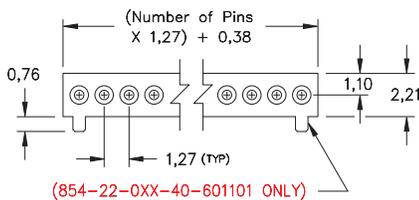
# SPRING-LOADED CONNECTORS

## SERIES 854 • 1,27 GRID Z-BEND SURFACE MOUNT • SINGLE ROW STRIPS

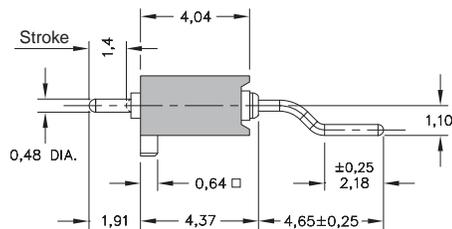


- Modular contacts for use on 1,27 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount soldering processes
- 854 series contact strips are designed for SMT termination onto printed circuit boards

### SINGLE ROW Series 854



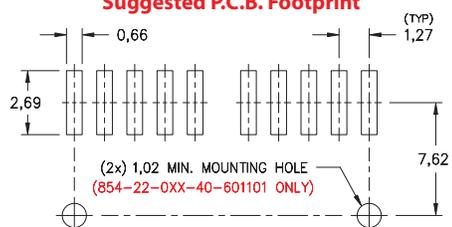
854 Series without Mounting Pegs



854 Series with Mounting Pegs

Coplanarity 0,13. For pin counts >20 positions, consult Technical Support.

### Suggested P.C.B. Footprint



## ORDERING INFORMATION

### Series 854 without Mounting Pegs (Bulk Packaged)

854-22-0XX-40-001101

Specify number of contacts 01-20

### Series 854 with Mounting Pegs (Bulk Packaged)

854-22-0XX-40-601101

Specify number of contacts 01-20

### Series 854 with Mounting Pegs (Tape & Reel Packaged, 2,400 parts per reel)

854-22-0XX-40-601191

Specify number of contacts 02

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
Spring: Beryllium copper-plated 0,25µm gold  
Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
Spring force @ mid stroke (0,7): 60 grams  
Durability: Up to 100,000 cycles

### Electrical:

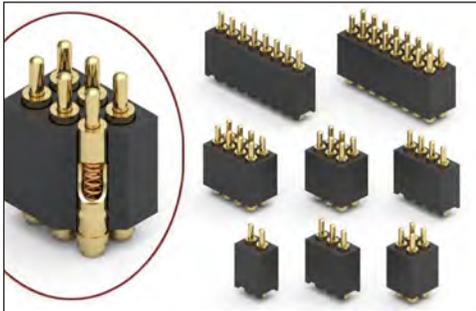
Voltage rating: 100Vrms/150Vdc  
Current rating: 2A (continuous), 3A (peak) per contact  
Contact resistance: 20mΩ max.  
Insulation resistance: 10,000MΩ min.  
Dielectric strength: 700Vrms min.  
Capacitance: 1pF max.

RoHS-2  
2011/65/EU



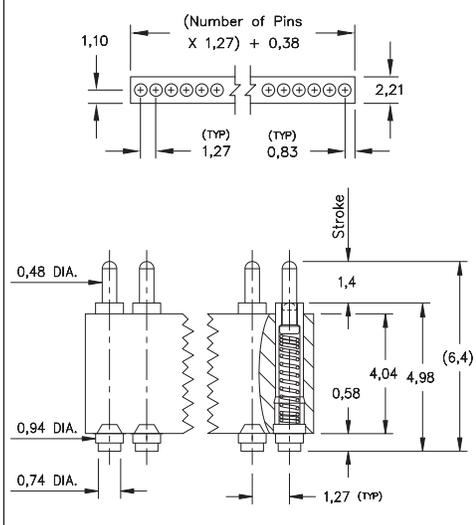
# SPRING-LOADED CONNECTORS

## SERIES 854 & 855 • 1,27 GRID SURFACE MOUNT, HIGH DENSITY • SINGLE AND DOUBLE ROW STRIPS

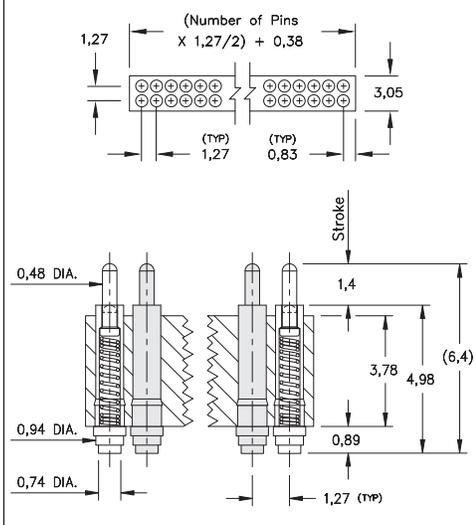


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 854 & 855 series contact strips are designed for manual placement onto 1,02 Ø solder pads
- 855 series is also available on tape & reel packaging, see page 19.1

### SINGLE ROW Series 854



### DOUBLE ROW Series 855



## ORDERING INFORMATION

### Single Row Series 854

854-22-0XX-30-001101

Specify number of contacts 02-20

### Double Row Series 855

855-22-0XX-30-001101

Specify number of contacts 04-40

For 855 Tape & Reel packaging, see page 19.1

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 100,000 cycles

### Electrical:

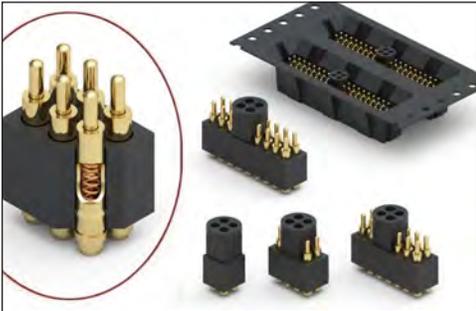
Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU



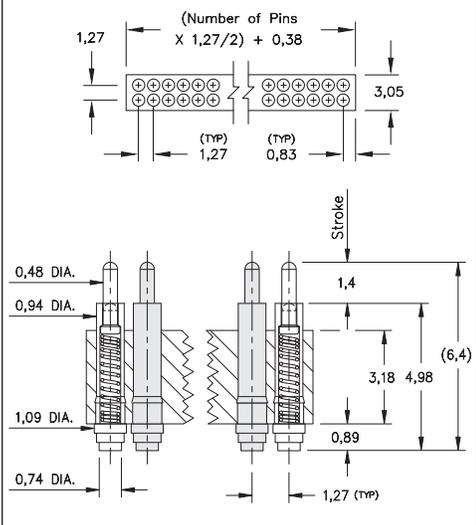
# SPRING-LOADED CONNECTORS

## SERIES 855 • 1,27 GRID SURFACE MOUNT, HIGH DENSITY • DOUBLE ROW STRIPS ON TAPE & REEL

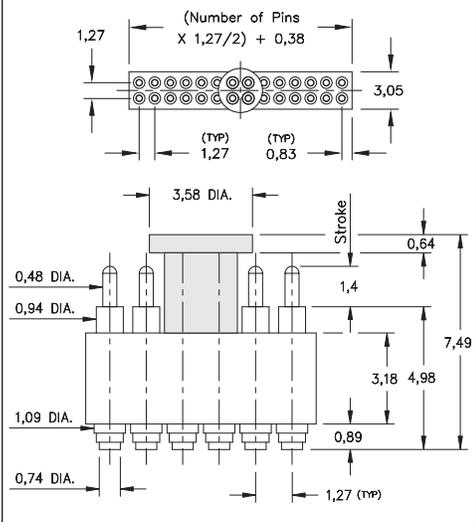


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 855 series is available on carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. For details contact Mill-Max Technical support

### DOUBLE ROW Series 855



### Series 855 w/ removable pick n place cap



## ORDERING INFORMATION

### Double Row Series 855

855-22-0XX-30-002191

Specify number or pins  
04-40

Tape & reel packaged = 191  
660 parts per 330mm reel

Positions: 6, 10, 14, 18, 22, 26, 30, 34, 38 the Pick n Place  
Vacuum Cap will be offset from center by 0,64mm

Positions: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40 the Pick n Place  
Vacuum Cap will be centered

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51 μm gold over 2,54 μm nickel  
Spring: Beryllium copper-plated 0,25 μm gold  
Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height: 25 grams  
Spring force @ mid stroke (0,7): 60 grams  
Durability: Up to 100,000 cycles

#### Electrical:

Voltage rating: 100Vrms/150Vdc  
Current rating: 2A (continuous), 3A (peak) per contact  
Contact resistance: 20mΩ max.  
Insulation resistance: 10,000MΩ min.  
Dielectric strength: 700Vrms min.  
Capacitance: 1pF max.

RoHS-2  
2011/65/EU



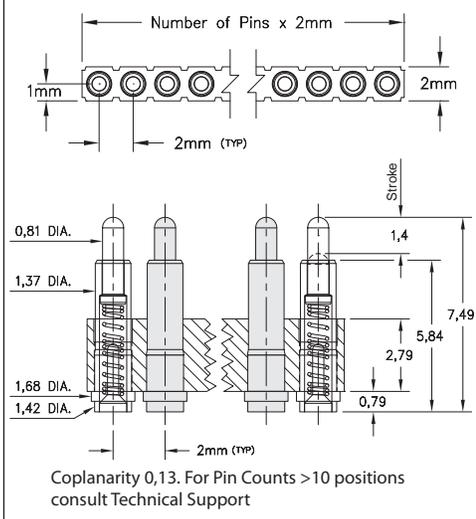
# SPRING-LOADED CONNECTORS

## SERIES 836 & 838 • 2mm GRID SURFACE MOUNT • SINGLE AND DOUBLE ROW STRIPS

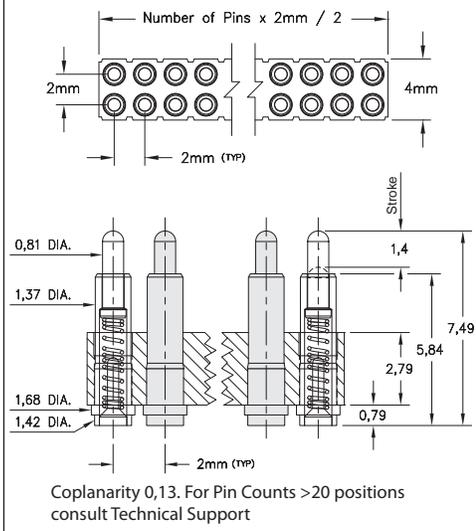


- Modular contacts for use on 2mm grid, available in single and double row contact strips with rated travel of 0,7 and max. stroke of 1,4
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for SMT soldering processes
- Both 836 & 838 series, are available on 32mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481
- 836 & 838 series contact strips are designed for manual or automatic placement onto 1,68 Ø solder pads

### SINGLE ROW Series 836



### DOUBLE ROW Series 838



## ORDERING INFORMATION

### Series 836 (Bulk Packaged)

836-22-0XX-30-001101

Specify number of contacts 02-10

### Series 836 (Tape & Reel Packaged, 400 parts per 330mm Reel)

836-22-0XX-30-001191

Specify number of contacts 02-10

### Series 838 (Bulk Packaged)

838-22-0XX-30-001101

Specify number of contacts 04-20

### Series 838 (Tape & Reel Packaged, 400 parts per 330mm Reel)

838-22-0XX-30-001191

Specify number of contacts 04-20

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µmgold over 2,54µm nickel  
 Spring: Stainless Steel-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS - 2  
2011/65/EU



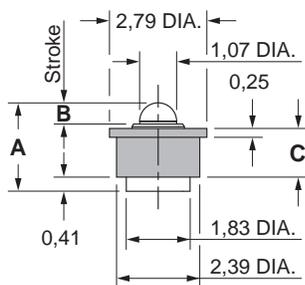
# SPRING-LOADED CONNECTORS

## SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • SURFACE MOUNT

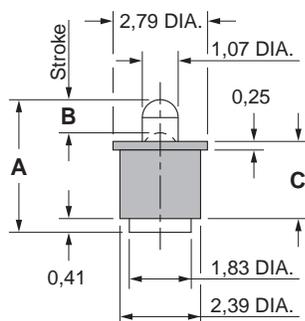


- Discrete insulated spring-loaded pins; available in seven heights from 2,54 to 5,99, with rated travel from 0,3 to 0,7
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for SMT soldering processes
- 807 series, contact styles 0 through 6, are available in bulk or on 16mm wide carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. See below for ordering information

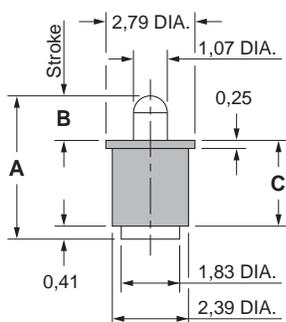
**Series 807 (Contact Style 0)**



**Series 807 (Contact Style 1 & 2)**



**Series 807 (Contact Style 3-6)**



## ORDERING INFORMATION

### Series 807 (Bulk Packaged)

807-22-001-30-00X101

Specify contact style 0-6

### Series 807 (Tape & Reel Packaged)

807-22-001-30-00X191

Specify contact style 0-6

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Quantity per Reel
0	2,54	0,3	0,51-0,61	1,39	2,620
1	3,48	0,5	0,76-0,99	2,08	1,750
2	3,94	0,5	0,89-0,99	2,29	1,750
3	4,50	0,7	1,14-1,4	2,69	1,055
4	5,0	0,7	1,14-1,4	3,2	780
5	5,51	0,7	1,14-1,4	3,71	780
6	5,99	0,7	1,14-1,4	4,19	780

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring (Contact style 0): Stainless Steel-plated 0,25µm gold  
 Spring (Contact style 1-6): Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height (A) (Contact style 0-6): 25 grams  
 Spring force @ mid stroke (B/2) (Contact style 0): 70 grams  
 Spring force @ mid stroke (B/2) (Contact style 1-6): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.

RoHS-2  
2011/65/EU



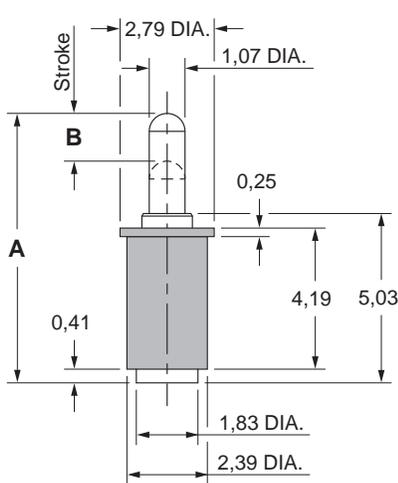
# SPRING-LOADED CONNECTORS

## SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • SURFACE MOUNT

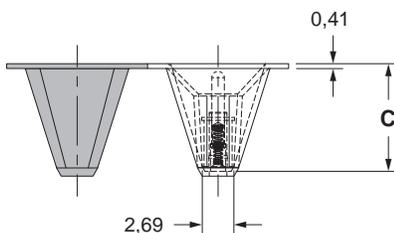


- Discrete insulated spring-loaded pins; available in ten heights from 6,48 to 10,92, with rated travel of 0,7
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most SMT soldering processes
- 807 series, contact styles 0 through 9, are available in bulk or on 16mm wide carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. See below for ordering information

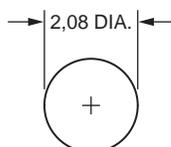
### Series 807 (Contact Style 0-9)



### Series 807 (Tape Pocket Depth)



### Series 807 (Suggested footprint layout)



## ORDERING INFORMATION

### Series 807 (Bulk Packaged)

807-22-001-30-01X101

Specify contact style 0-9

### Series 807 (Tape & Reel Packaged)

807-22-001-30-01X191

Specify contact style 0-9

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Tape Depth (C)	Quantity per Reel
0	6,48	0,7	1,14-1,4	7,24	750
1	6,99	0,7	1,14-1,4	7,24	750
2	7,49	0,7	1,14-1,4	8,28	600
3	8,0	0,7	1,14-1,4	8,28	600
4	8,51	0,7	1,14-1,4	9,17	550
5	8,89	0,7	1,14-1,4	9,17	550
6	9,4	0,7	1,14-1,4	10,19	475
7	9,91	0,7	1,14-1,4	10,19	475
8	10,41	0,7	1,14-1,4	11,2	430
9	10,92	0,7	1,14-1,4	11,2	430

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring (Contact style 0-9): Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A) (Contact style 0-9): 25 grams  
 Spring force @ mid stroke (B/2) (Contact style 0-9): 60 grams  
 Durability: Up to 1,000,000 cycles

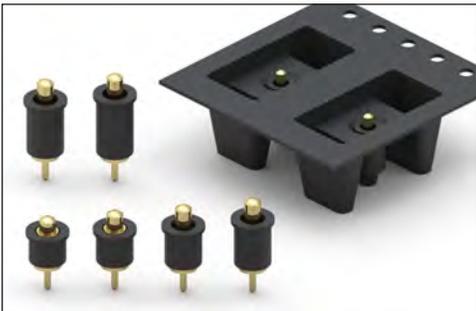
#### Electrical:

Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.

RoHS-2  
2011/65/EU

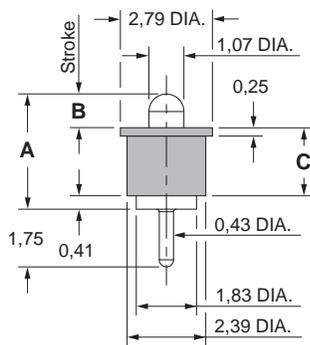
# SPRING-LOADED CONNECTORS

## SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • THROUGH-HOLE MOUNT

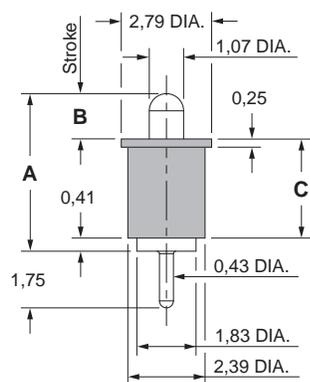


- Discrete insulated spring-loaded pins; available in six heights from 3,48 to 6,0, with rated travel of 0,5 & 0,7
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most SMT soldering processes
- 807 series, contact styles 1 through 6, are available in bulk or on 24mm wide carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. See below for ordering information

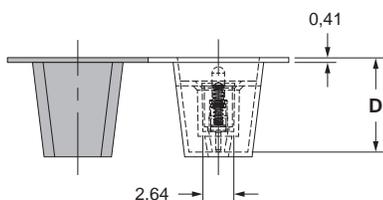
### Series 807 (Contact Style 1 & 2)



### Series 807 (Contact Style 3, 4, 5 & 6)



### Series 807 (Tape Pocket Depth)



## ORDERING INFORMATION

### Series 807 (Bulk Packaged)

807-22-001-10-00X101

Specify contact style 1-6

### Series 807 (Tape & Reel Packaged)

807-22-001-10-00X191

Specify contact style 1-6

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	3,48	0,5	0,76-1,0	2,08	6,0	880
2	3,94	0,5	0,89-1,0	2,29	6,0	880
3	4,5	0,7	1,14-1,4	2,69	7,07	745
4	5,0	0,7	1,14-1,4	3,2	7,07	745
5	5,51	0,7	1,14-1,4	3,71	8,06	640
6	6,0	0,7	1,14-1,4	4,19	8,06	640

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring (Contact style 1-6): Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A) (Contact style 1-6): 25 grams  
 Spring force @ mid stroke (B/2) (Contact style 1-6): 60 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.

RoHS-2  
2011/65/EU



# SPRING-LOADED CONNECTORS

## SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • THROUGH-HOLE MOUNT



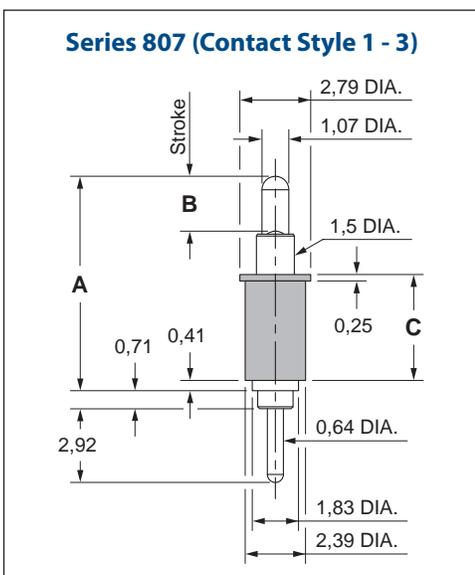
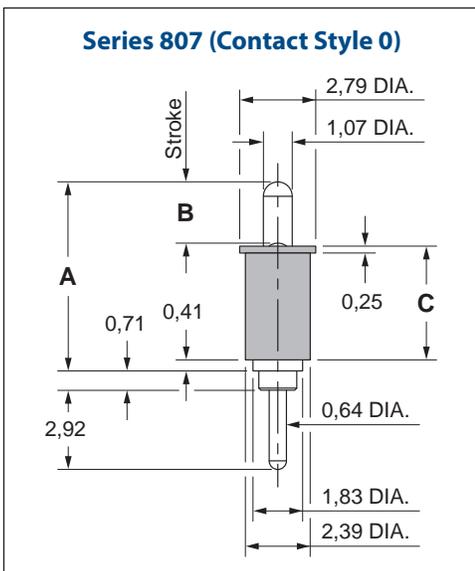
- Discrete insulated spring-loaded pins; available in four heights from 6,96 to 9,25, with rated travel of 1,14
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most soldering processes
- 807 series, contact styles 0 through 3, are packaged in bulk. See below for ordering information

### ORDERING INFORMATION

#### Series 807 (Bulk Packaged)

807-22-001-10-02X101

Specify contact style 0-3



Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)
0	6,96	1,14	2,16-2,29	4,19
1	7,72	1,14	2,16-2,29	4,19
2	8,48	1,14	2,16-2,29	4,19
3	9,25	1,14	2,16-2,29	4,19

#### Technical Specifications

##### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring (Contact style 0-3): Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

##### Mechanical:

Spring force @ initial height (A) (Contact style 0-3): 25 grams  
 Spring force @ mid stroke (B/2) (Contact style 0-3): 60 grams  
 Durability: Up to 1,000,000 cycles

##### Electrical:

Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.  
 Dielectric strength: 700Vrms min.

RoHS - 2  
2011/65/EU



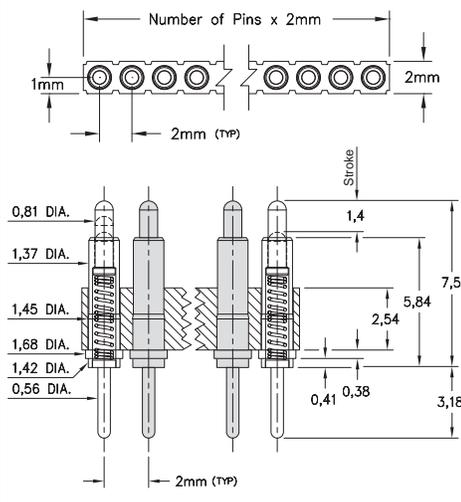
# SPRING-LOADED CONNECTORS

## SERIES 836 & 838 • 2MM GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

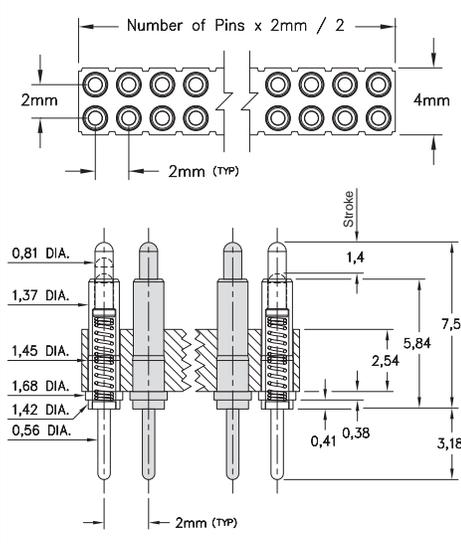


- Modular contacts for use on 2mm grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 836 & 838 series contact strips are designed for manual placement into  $\varnothing 0,76 \pm 0,08$  plated through-holes in the circuit board prior to soldering

### SINGLE ROW Series 836



### DOUBLE ROW Series 838



## ORDERING INFORMATION

### Single Row Series 836

836-22-0XX-10-001101

Specify number of contacts 01-50

### Double Row Series 838

838-22-XXX-10-001101

Specify number of contacts 04-100

## Technical Specifications

### Materials:

Contact piston & base: Machined copper alloy plated 0,51  $\mu\text{m}$  gold over 2,54  $\mu\text{m}$  nickel  
 Spring: Beryllium copper-plated 0,25  $\mu\text{m}$  gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

### Mechanical:

Spring force @ initial height: 25 grams  
 Spring force @ mid stroke (0,7): 60 grams  
 Durability: Up to 1,000,000 cycles

### Electrical:

Voltage rating: 100Vrms/150Vdc  
 Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20m $\Omega$  max.  
 Insulation resistance: 10,000M $\Omega$  min.  
 Dielectric strength: 700Vrms min.  
 Capacitance: 1pF max.

RoHS-2  
2011/65/EU

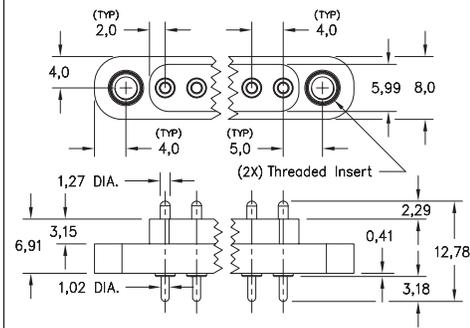


# SPRING-LOADED CONNECTORS

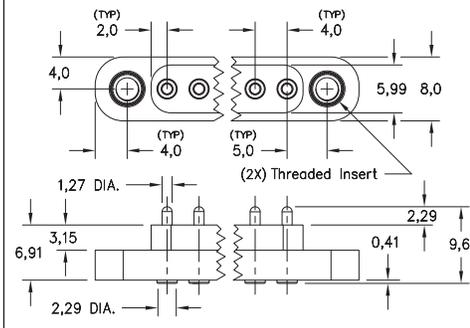
## SERIES 858 • 4MM GRID RUGGED CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT



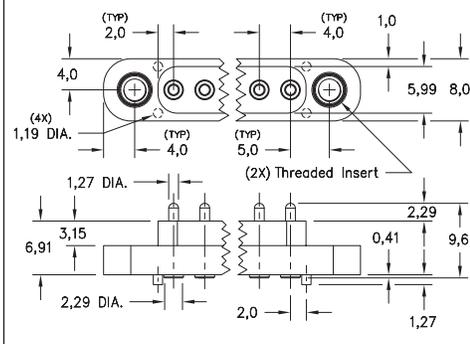
**Series 858-22-00X-10-0X1101**



**Series 858-22-00X-30-0X1101**



**Series 858-22-00X-30-6X1101**



- Rugged Modular contacts for use on 4mm grid, supplied in 2 - 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability. Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Mounting tabs provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- Low resistance, high current contacts are rated at 9 amps @ 10°C Temperature rise
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Series 858-22-00X-10-0X1101 connectors are designed for manual placement into 1,22±0,076 Ø plated through-holes in the circuit board prior to soldering
- Series 858-22-00X-30-0X1101 and 858-22-00X-30-6X1101 connectors are designed for manual placement onto 2,54 Ø solder pads

### ORDERING INFORMATION

#### Series 858 (Through-Hole Mount)

858-22-00X-10-0X1101  
 Specify number of pins 2-6      No Threaded inserts = 0  
 (#4-40) Threaded inserts = 1

#### Series 858 (Surface Mount)

858-22-00X-30-0X1101  
 Specify number of pins 2-6      No Threaded inserts = 0  
 (#4-40) Threaded inserts = 1

#### Series 858 (Surface Mount with Alignment Pins)

858-22-00X-30-6X1101  
 Specify number of pins 2-6      No Threaded inserts = 0  
 (#4-40) Threaded inserts = 1

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 5,08µm gold over 2,54µm nickel  
 Spring: Stainless Steel 302  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height: 35 grams  
 Spring force @ mid stroke: 120 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

Current rating: 9A @ 10° C Temp. rise above ambient (20°C)  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.

RoHS - 2  
 2011/65/EU



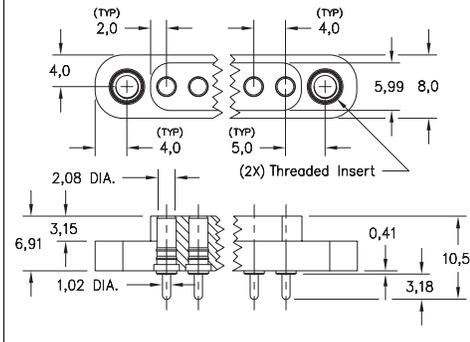
# SPRING-LOADED CONNECTORS

## SERIES 858 • 4MM GRID RUGGED FLAT FACE TARGET CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT

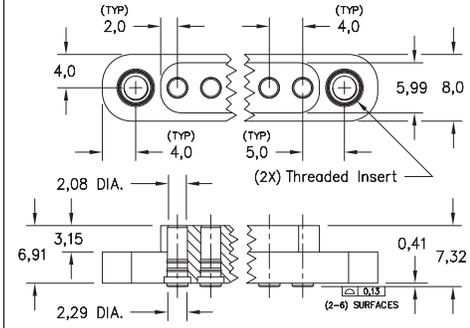


- Rugged Target Connectors for use on 4mm grid, supplied in 2 - 6 position connectors
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our 858-22-00X-X0-XX1101 series spring-loaded connectors
- Target connectors use MM #1959-0 and #1969-0 pins. See page 223.5 for details
- Mounting tabs provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- High temp. thermoplastic insulators are suitable for wave and reflow soldering processes
- Series 858-10-00X-10-0X1000 connectors are designed for manual placement into 1,22±0,76 Ø plated through-holes in the circuit board prior to soldering
- Series 858-10-00X-30-0X1000 and 858-10-00X-30-6X1000 connectors are designed for manual placement onto 2,54 Ø minimum solder pads

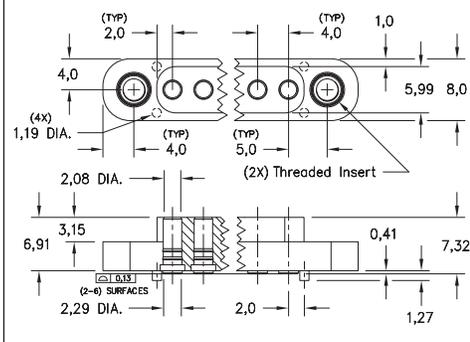
### Series 858-10-00X-10-0X1000



### Series 858-10-00X-30-0X1000



### Series 858-10-00X-30-6X1000



## ORDERING INFORMATION

### Series 858 (Through-Hole Mount)

858-10-00X-10-0X1000

Specify number of pins 2-6 → No Threaded inserts = 0 (#4-40) Threaded inserts = 1

### Series 858 (Surface Mount)

858-10-00X-30-0X1000

Specify number of pins 2-6 → No Threaded inserts = 0 (#4-40) Threaded inserts = 1

### Series 858 (Surface Mount with Alignment Pins)

858-10-00X-30-6X1000

Specify number of pins 2-6 → No Threaded inserts = 0 (#4-40) Threaded inserts = 1



XX=Plating Code See Below

For Electrical, Mechanical & Environmental Data, See page 264

SPECIFY PLATING CODE XX=	10		
Pin Plating 	0,25 µm Au		



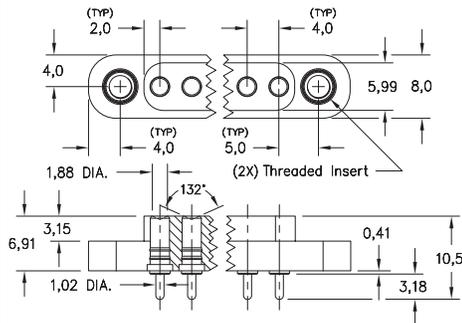
# SPRING-LOADED CONNECTORS

## SERIES 858 • 4MM GRID RUGGED CONCAVE FACE TARGET CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT

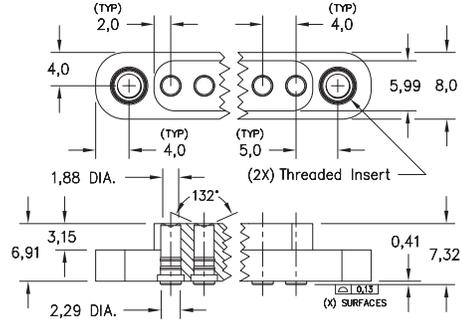


- Rugged Target Connectors for use on 4mm grid, supplied in 2 - 6 position connectors
- Target Connectors provide an excellent gold-plated conductive mating surface for spring-loaded connectors. These series are offered with a concave face providing additional surface area for mating with our 858-22-00X-X0-XX1101 series spring-loaded connectors
- Target connectors use MM #1959-1 and #1969-1 pins. See page 223.5 for details
- Mounting tabs provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- High temp. thermoplastic insulators are suitable for wave and reflow soldering processes
- Series 858-10-00X-10-0X2000 connectors are designed for manual placement into  $1,22 \pm 0,76 \text{ } \varnothing$  plated through-holes in the circuit board prior to soldering
- Series 858-10-00X-30-0X2000 and 858-10-00X-30-6X2000 connectors are designed for manual placement onto  $2,54 \text{ } \varnothing$  minimum solder pads

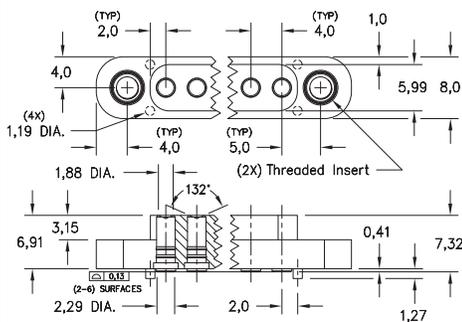
### Series 858-10-00X-10-0X2000



### Series 858-10-00X-30-0X2000



### Series 858-10-00X-30-6X2000



## ORDERING INFORMATION

### Series 858 (Through-Hole Mount)

858-10-00X-10-0X2000

Specify number of pins 2-6

No Threaded inserts = 0  
(#4-40) Threaded inserts = 1

### Series 858 (Surface Mount)

858-10-00X-30-0X2000

Specify number of pins 2-6

No Threaded inserts = 0  
(#4-40) Threaded inserts = 1

### Series 858 (Surface Mount with Alignment Pins)

858-10-00X-30-6X2000

Specify number of pins 2-6

No Threaded inserts = 0  
(#4-40) Threaded inserts = 1

RoHS-2  
2011/65/EU

XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10		
Pin Plating	0,25 $\mu\text{m}$ Au		



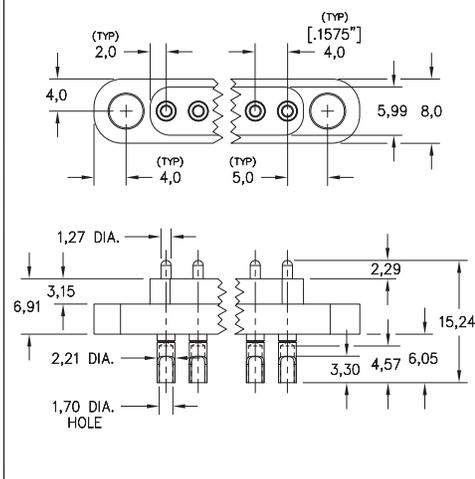
# SPRING-LOADED CONNECTORS

## SERIES 868 • 4MM GRID RUGGED CONNECTORS • SOLDERCUP TERMINATION

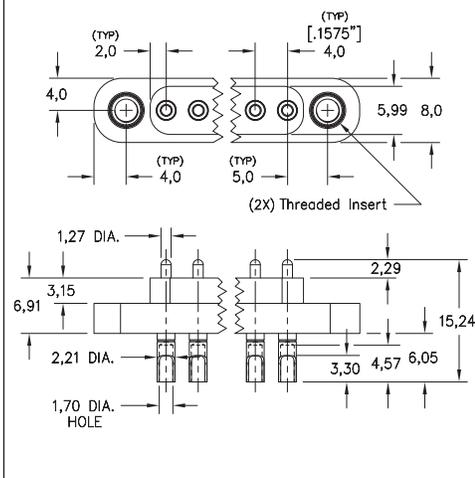


- Rugged Modular contacts for use on 4mm grid, supplied in 2 - 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability. Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Mounting tabs provide a means for secure attachment to PCB's, cable assemblies or other housings and may be specified with or without threaded inserts.
- High temperature thermoplastic insulators are suitable for most automated and manual soldering processes
- Series 868-22-00X-00-0X101 connectors are ideal for use with Mill-Max 858 and 868 series SMT, through hole or wire termination target connectors
- Solder cup termination accommodates up to 16 AWG wire
- Series 868-22-00X-00-0X101 use 0868-0 spring-loaded pins. See page 23.1 for details

**Series 868-22-00X-00-001101**



**Series 868-22-00X-00-011101**



### ORDERING INFORMATION

#### Series 868 (Through-Hole Mount)

868-22-00X-00-001101  
 Specify number of pins 2-6      No Threaded inserts

#### Series 868 (Through-Hole Mount)

868-22-00X-00-011101  
 Specify number of pins 2-6      (#4-40) Threaded inserts

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring: Stainless Steel 302 plated 0,25µm gold over nickel  
 Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height: 35 grams  
 Spring force @ mid stroke: 120 grams  
 Durability: Up to 1,000,000 cycles

#### Electrical:

Current rating: 9A @ 10° C Temp. rise above ambient (20°C)  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.

RoHS-2  
2011/65/EU



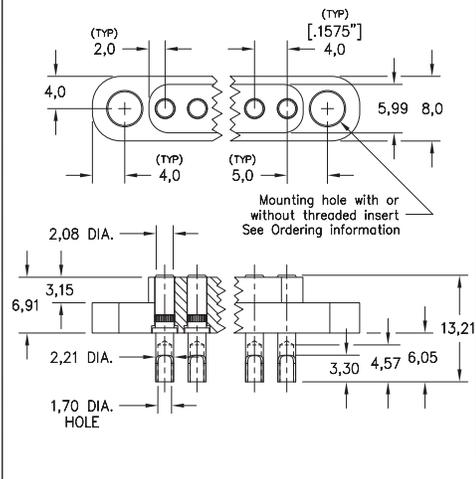
# SPRING-LOADED CONNECTORS

## SERIES 868 • 4MM GRID RUGGED TARGET CONNECTORS FLAT & CONCAVE FACE • SOLDERCUP TERMINATION

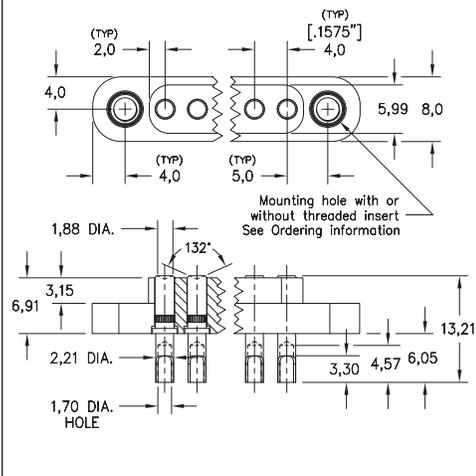


- Rugged Target Connectors for use on 4mm grid, supplied in 2 - 6 position connectors
- Target Connectors provide an excellent gold-plated conductive mating surface for spring-loaded connectors. These series are offered with flat or concave face, providing additional surface area, for mating with Mill-Max 858 and 868 series SMT, through hole or wire termination spring loaded connectors
- Mounting tabs provide a means for secure attachment to PCB's, cable assemblies or other housings and may be specified with or without threaded inserts.
- High temperature thermoplastic insulators are suitable for most automated and manual soldering processes
- Solder cup termination accommodates up to 16 AWG wire
- Series 868-10-00X-00-0X100 use MM #1968-0 target pins & Series 868-10-00X-00-0X200 use #1968-1 target pins. See page 223.5 for details

### Series 868-10-00X-00-0X1000



### Series 868-10-00X-00-0X2000



## ORDERING INFORMATION

### Series 868 (Flat Face Through-Hole Mount)

868-10-00X-00-0X1000

Specify number of pins 2-6 → No Threaded inserts = 0 (#4-40) Threaded inserts = 1

### Series 868 (Concave Face Through-Hole Mount)

868-10-00X-00-0X2000

Specify number of pins 2-6 → No Threaded inserts = 0 (#4-40) Threaded inserts = 1



XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10		
Pin Plating 	0,25 µm Au		



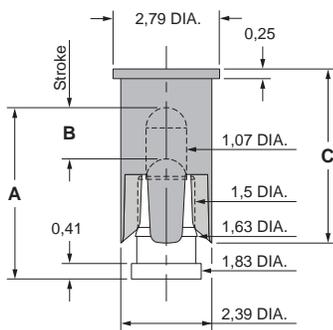
# SPRING-LOADED CONNECTORS

## SERIES 806 • REMOVABLE PICK & PLACE CAP, SPRING-LOADED PINS • SURFACE MOUNT

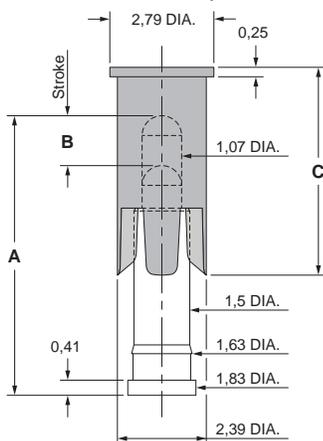


- Surface mount spring-loaded pins with removable pick & place cap are available in nine heights from 3,5 to 7,5 with a rated travel of either 0,5 or 0,7
- Spring pins used in this series are Mill-Max 0900-X and 0907-X (see page 23 for more details)
- The pick & place cap allows individual spring-loaded contacts to be packaged on tape and reel for automated assembly. The caps are easily removed after soldering leaving only the spring pin on the board.
- Pick & place cap material is high temperature thermoplastic suitable for most SMT soldering processes
- Supplied on 16 mm wide carrier tape, 330mm reels; packaging per EIA-481. See below for ordering information

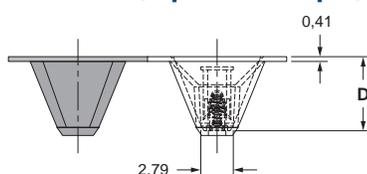
### Series 806 (Contact Style 1,2,3,4,10,11)



### Series 806 (Contact Style 12,13 & 14)



### Series 806 (Tape Pocket Depth)



## ORDERING INFORMATION

### Series 806 (Tape & Reel Packaged)

806-22-001-30-0XX191

Specify contact style 1-4  
Specify contact style 10-14

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	3,5	0,5	0,76-1,0	4,57	6,4	780
2	3,94	0,5	0,76-1,0	4,57	6,4	780
3	4,5	0,7	1,27-1,4	4,57	6,4	780
4	5,0	0,7	1,27-1,4	4,57	6,4	780
10	5,51	0,7	1,27-1,4	5,59	7,24	750
11	5,99	0,7	1,27-1,4	5,59	7,24	750
12	6,48	0,7	1,27-1,4	5,59	9,17	550
13	6,99	0,7	1,27-1,4	5,59	9,17	550
14	7,49	0,7	1,27-1,4	5,59	9,17	550

### Technical Specifications

#### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel

Spring (Contact style 1-14): Beryllium copper-plated 0,25µm gold

Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height (A) (Contact style 1-14): 25 grams

Spring force @ mid stroke (B/2) (Contact style 1-14): 60 grams

Durability: Up to 1,000,000 cycles

#### Electrical:

Current rating: 2A (continuous), 3A (peak) per contact

Contact resistance: 20mΩ max.

Insulation resistance: 10,000MΩ min.

RoHS-2  
2011/65/EU



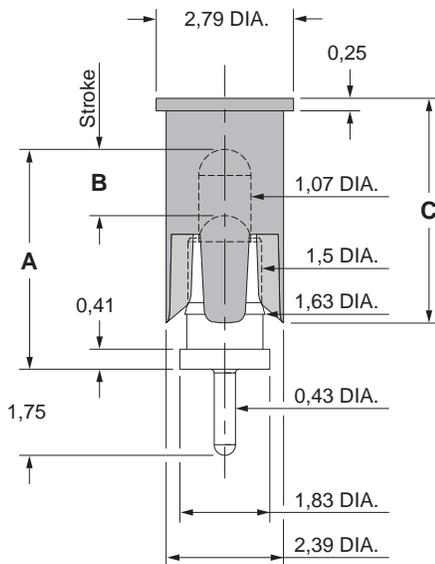
# SPRING-LOADED CONNECTORS

## SERIES 806 • REMOVABLE PICK & PLACE CAP, SPRING-LOADED PINS • THROUGH-HOLE MOUNT

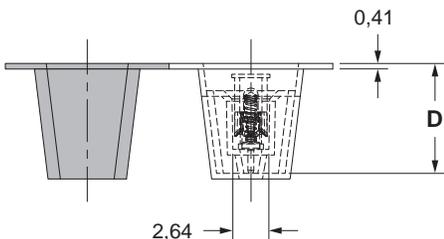


- Through hole mount spring-loaded pins with removable pick & place cap are available in four heights from 3,5 to 5,0 with a rated travel of either 0,5 or 0,7
- Spring pins used in this series are Mill-Max 0906-X (see page 25 for more details)
- The pick & place cap allows individual spring-loaded contacts to be packaged on tape and reel for automated assembly. The caps are easily removed after soldering leaving only the spring pin on the board
- Pick & place cap material is high temperature thermoplastic suitable for most SMT soldering processes
- Supplied on 24 mm wide carrier tape, 330mm reels; packaging per EIA-481. See below for ordering information

Series 806 (Contact Style 1-4)



Series 806 (Tape Pocket Depth)



### ORDERING INFORMATION

#### Series 806 (Tape & Reel Packaged)

806-22-001-10-00X191

Specify contact style 1-4

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	3,5	0,5	0,76-1,0	4,57	8,05	640
2	3,94	0,5	0,76-1,0	4,57	8,05	640
3	4,5	0,7	1,27-1,4	4,57	8,05	640
4	5,0	0,7	1,27-1,4	4,57	8,05	640

#### Technical Specifications

##### Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel  
 Spring (Contact style 1-4): Beryllium copper-plated 0,25µm gold  
 Insulator: High temperature thermoplastic, rated UL94 V-0

##### Mechanical:

Spring force @ initial height (A) (Contact style 1-4): 25 grams  
 Spring force @ mid stroke (B/2) (Contact style 1-4): 60 grams  
 Durability: Up to 1,000,000 cycles

##### Electrical:

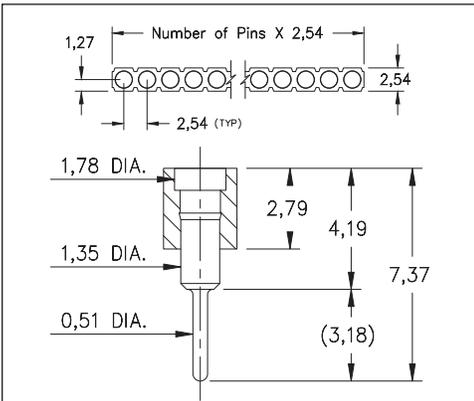
Current rating: 2A (continuous), 3A (peak) per contact  
 Contact resistance: 20mΩ max.  
 Insulation resistance: 10,000MΩ min.

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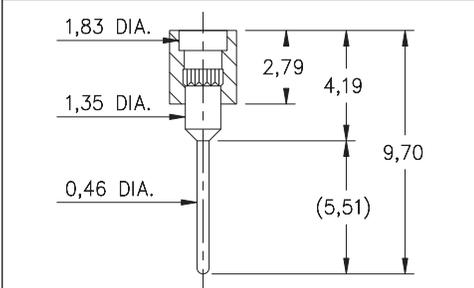


# SPRING-LOADED CONNECTORS

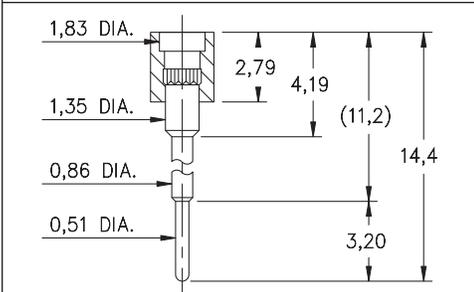
## SERIES 319, 330 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS



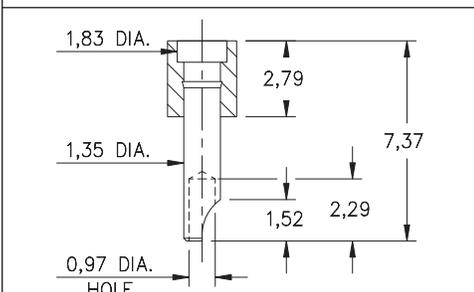
**FIG. 1**



**FIG. 2**

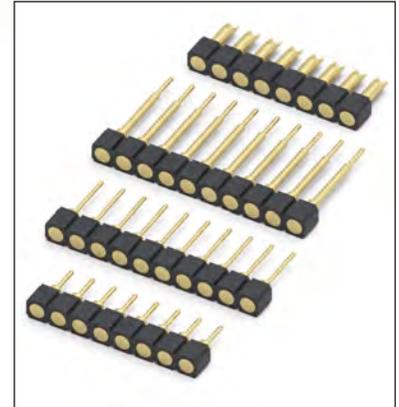


**FIG. 3**



**FIG. 4**

- Series 319 and 330 Spring Target Connectors, supplied in single row strips. Available in through-hole and wire termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1938, #1940, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic



### ORDERING INFORMATION

	Series 319...001	Standard Solder Tails
<b>FIG. 1</b>	319-10-1	-00-001000 Specify number of pins 01-64
<b>FIG. 2</b>	Series 319...002	Long Solder Tails
	319-10-1	-00-002000 Specify number of pins 01-64
<b>FIG. 3</b>	Series 319...005	Elevated with Solder Tails
	319-10-1	-00-005000 Specify number of pins 01-64
<b>FIG. 4</b>	Series 330...240	Solder Cups
	330-10-1	-00-240000 Specify number of pins 01-64



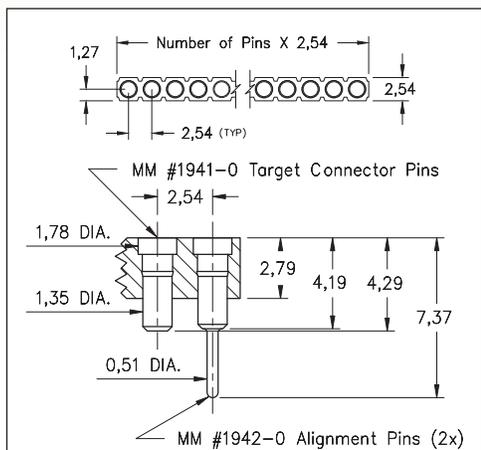
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

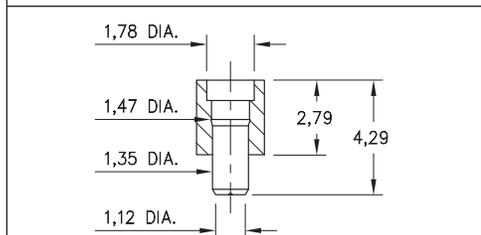
SPECIFY PLATING CODE XX=	10			
Pin Plating		0,25µm Au		

# SPRING-LOADED CONNECTORS

## SERIES 319, 399 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

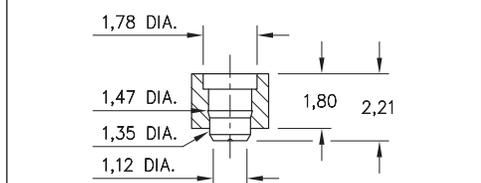


**FIG. 1**



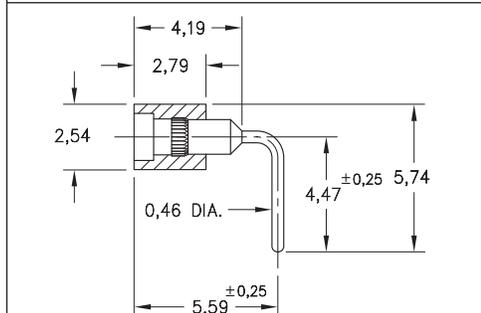
Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

**FIG. 2**



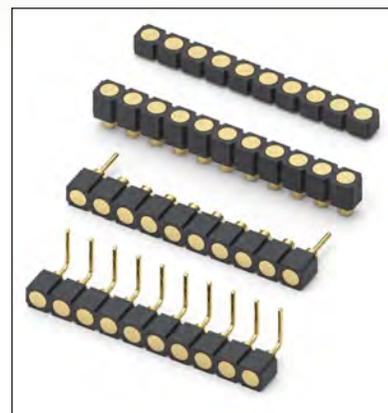
Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

**FIG. 3**

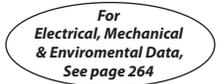


**FIG. 4**

- Series 319 and 399 Spring Target Connectors, supplied in single row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1940, #1941/1942, #1953 and #1954 pins. See pages 218 & 223.3 for details
- Insulators are high temperature thermoplastic



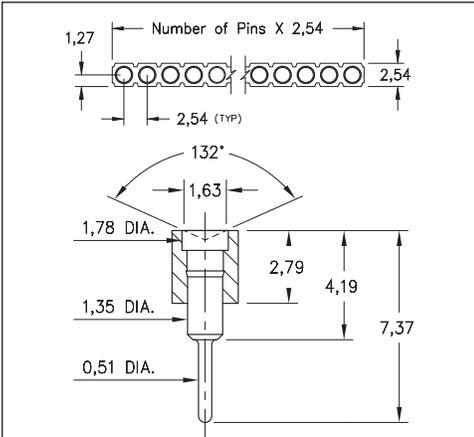
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 319...041</b> <b>Surface Mount w/ Alignments Pins</b>
	319-10-1__-30-041000 Specify number of pins      03-64
<b>FIG. 2</b>	<b>Series 319...008</b> <b>Surface Mount</b>
	319-10-1__-30-008000 Specify number of pins      01-64
<b>FIG. 3</b>	<b>Series 319...054</b> <b>Low Profile Surface Mount</b>
	319-10-1__-30-054000 Specify number of pins      01-64
<b>FIG. 4</b>	<b>Series 399...008</b> <b>Right Angle Solder Tails</b>
	399-10-1__-10-008000 Specify number of pins      01-64
  	
<b>SPECIFY PLATING CODE XX=</b>	10 
Pin Plating 	0,25µm Au

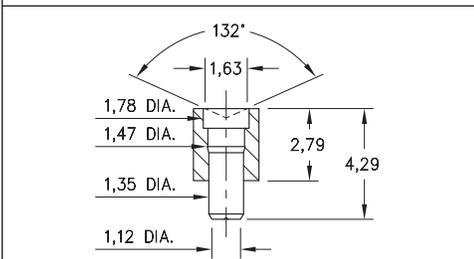


# SPRING-LOADED CONNECTORS

## SERIES 319, 399 • 2,54 GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

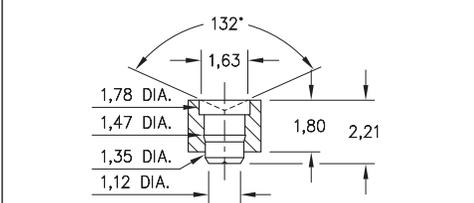


**FIG. 1**



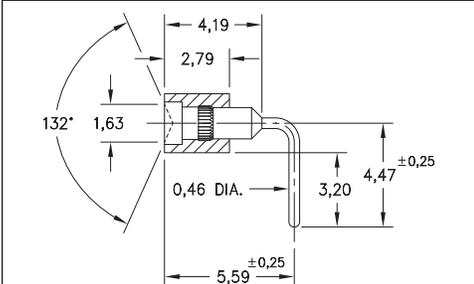
Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

**FIG. 2**



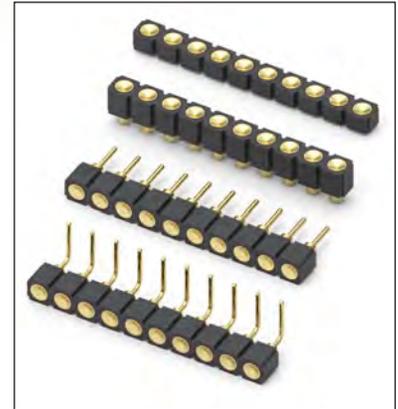
Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

**FIG. 3**

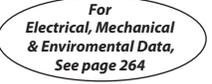


**FIG. 4**

- Series 319 and 399 Spring Target Connectors, supplied in single row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1948, #1955, #1957 and #1960 pins. See pages 223.1, 223.2 and 223.3 for details
- Insulators are high temperature thermoplastic



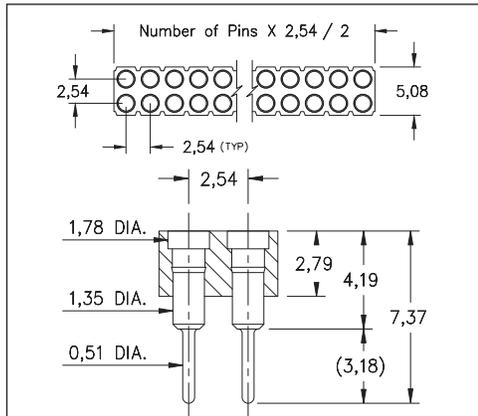
### ORDERING INFORMATION

	Series 319...006	Standard Solder Tails
<b>FIG. 1</b>	319-10-1	-00-006000
	Specify number of pins	01-64
	Series 319...007	Surface Mount
<b>FIG. 2</b>	319-10-1	-30-007000
	Specify number of pins	01-64
	Series 319...055	Low Profile Surface Mount
<b>FIG. 3</b>	319-10-1	-30-055000
	Specify number of pins	01-64
	Series 399...007	Right Angle Solder Tails
<b>FIG. 4</b>	399-10-1	-10-007000
	Specify number of pins	01-64
  		
<b>SPECIFY PLATING CODE XX=</b>	10	
Pin Plating	 0,25µm Au	

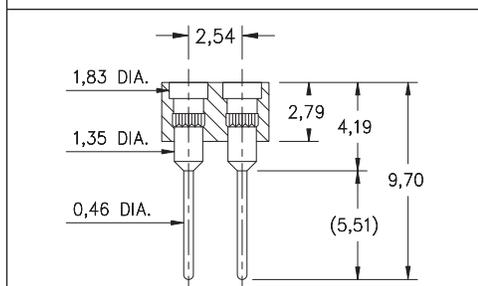


# SPRING-LOADED CONNECTORS

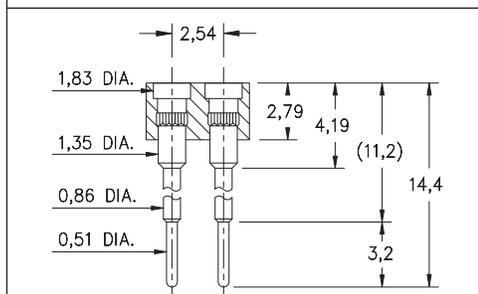
## SERIES 419, 430 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS



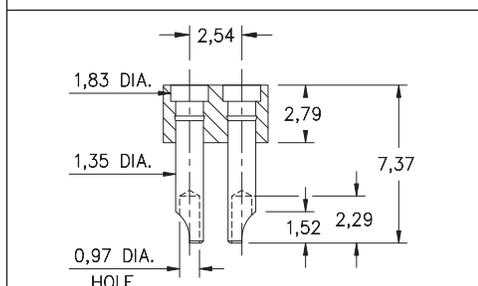
**FIG. 1**



**FIG. 2**

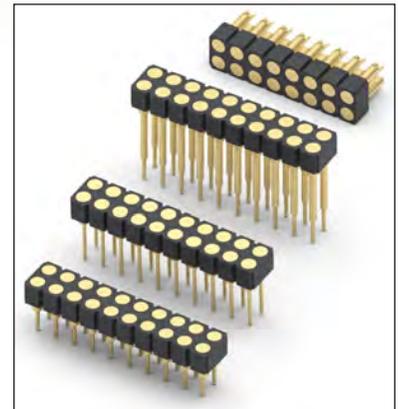


**FIG. 3**



**FIG. 4**

- Series 419 and 430 Spring Target Connectors, supplied in double row strips. Available in through-hole and wire termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1938, #1940, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic

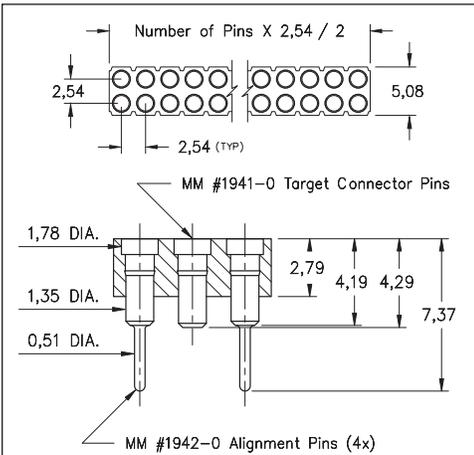


### ORDERING INFORMATION

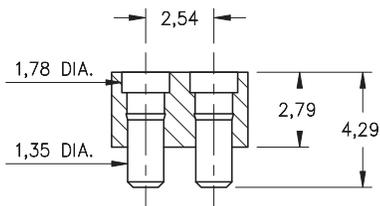
	Series 419...001	Standard Solder Tails
<b>FIG. 1</b>	419-10-2	-00-001000
	Specify number of pins	04-64
	Series 419...002	Long Solder Tails
<b>FIG. 2</b>	419-10-2	-00-002000
	Specify number of pins	04-64
	Series 419...005	Elevated with Solder Tails
<b>FIG. 3</b>	419-10-2	-00-005000
	Specify number of pins	04-64
	Series 430...240	Solder Cups
<b>FIG. 4</b>	430-10-2	-00-240000
	Specify number of pins	04-64
  		
<b>SPECIFY PLATING CODE XX=</b>	10	
Pin Plating 	0,25µm Au	

# SPRING-LOADED CONNECTORS

## SERIES 419, 499 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

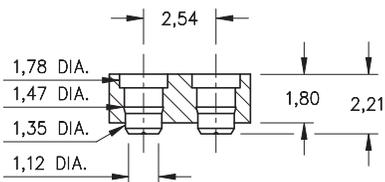


**FIG. 1**



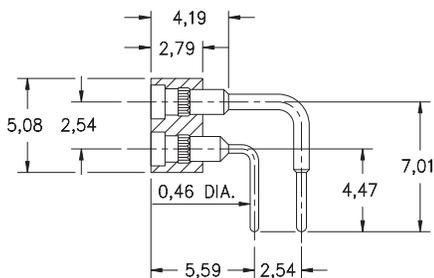
**FIG. 2**

Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.



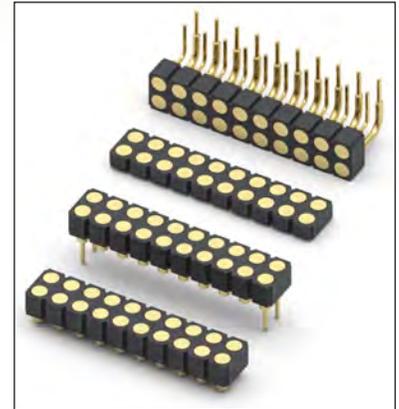
**FIG. 3**

Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

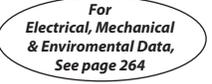


**FIG. 4**

- Series 419 and 499 Spring Target Connectors, supplied in double row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1940, #1941/1942, #1953 and #1954 pins. See pages 218 & 223.3 for details
- Insulators are high temperature thermoplastic

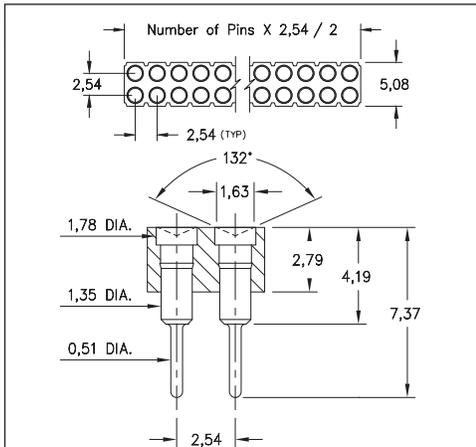


### ORDERING INFORMATION

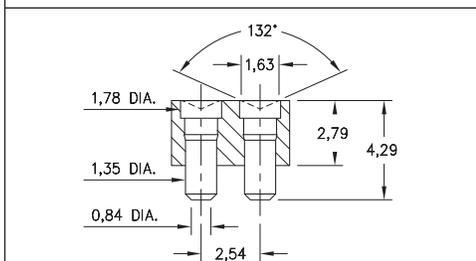
<b>FIG. 1</b>	<b>Series 419...042</b> <b>Surface Mount w/ Alignments Pins</b>
	419-10-2__-30-042000 Specify number of pins      06-72
<b>FIG. 2</b>	<b>Series 419...041</b> <b>Surface Mount</b>
	419-10-2__-30-041000 Specify number of pins      04-72
<b>FIG. 3</b>	<b>Series 419...054</b> <b>Low Profile Surface Mount</b>
	419-10-2__-30-054000 Specify number of pins      04-72
<b>FIG. 4</b>	<b>Series 499...008</b> <b>Right Angle Solder Tails</b>
	499-10-2__-10-008000 Specify number of pins      02-64
  	
<b>SPECIFY PLATING CODE XX=</b>	10 
Pin Plating 	0,25µm Au

# SPRING-LOADED CONNECTORS

## SERIES 419, 499 • 2,54 GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

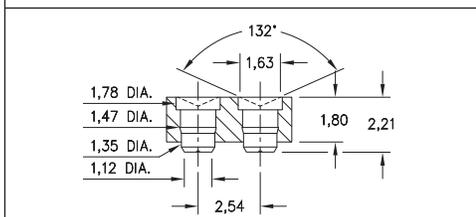


**FIG. 1**



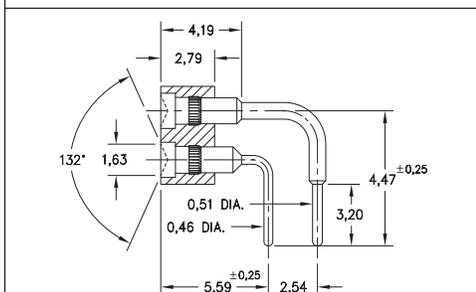
Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

**FIG. 2**



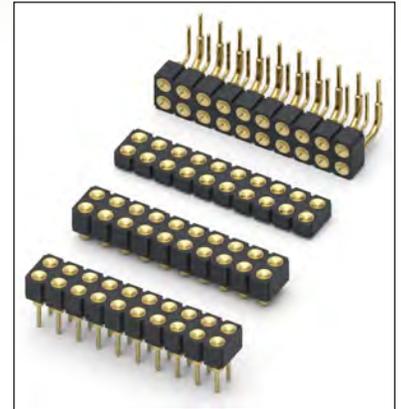
Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

**FIG. 3**



**FIG. 4**

- Series 419 and 499 Spring Target Connectors, supplied in double row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1947, #1948, #1955 and #1958/1960 pins. See pages 223.1, 223.2 and 223.3 for details
- Insulators are high temperature thermoplastic



### ORDERING INFORMATION

	Series 419...006	Standard Solder Tails
<b>FIG. 1</b>	419-10-2	-00-006000
	Specify number of pins	04-64
<b>FIG. 2</b>	Series 419...007	Surface Mount
	419-10-2	-30-007000
	Specify number of pins	04-72
<b>FIG. 3</b>	Series 419...055	Low Profile Surface Mount
	419-10-2	-30-055000
	Specify number of pins	04-72
<b>FIG. 4</b>	Series 499...007	Right Angle Solder Tails
	499-10-2	-10-007000
	Specify number of pins	02-64



XX=Plating Code  
See Below

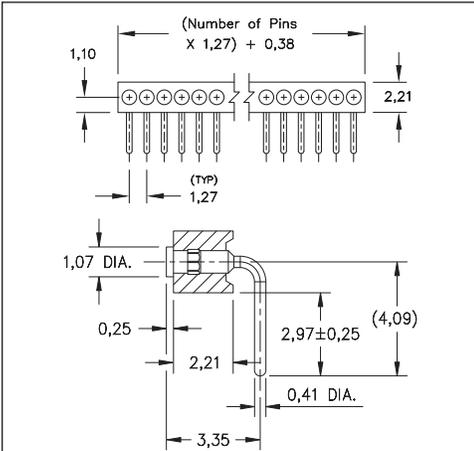
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10		
Pin Plating 	0,25µm Au		

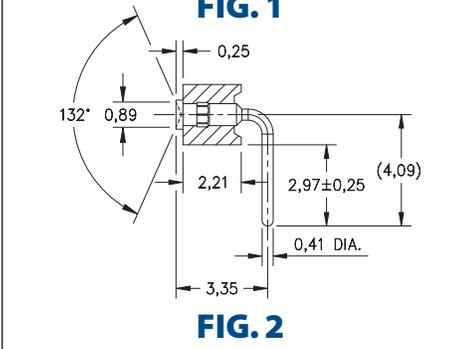


# SPRING-LOADED CONNECTORS

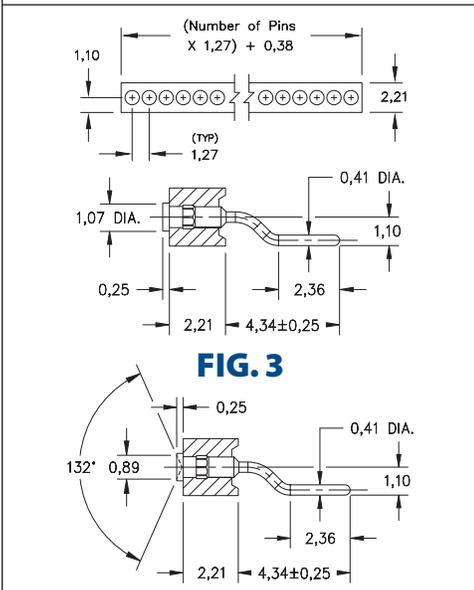
## SERIES 856 • 1,27 GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS



**FIG. 1**



**FIG. 2**

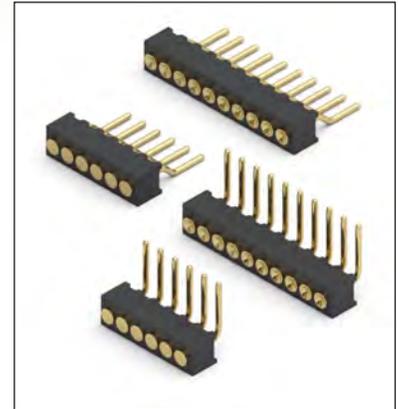


**FIG. 3**

Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

**FIG. 4**

- Series 856 Spring Target Connectors, supplied in single row strips
- Spring Target Connectors are offered with a flat or concave surface for making contact with our standard 0,48 dia. spring pin plungers. The target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector
- Target connectors use MM #1831-1 and #1931-1 pins. See page 223.2 for details
- Insulators are high temperature thermoplastic

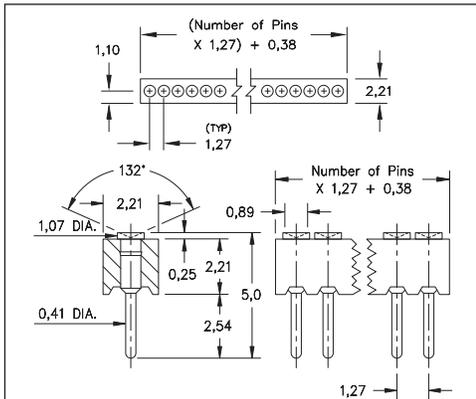


### ORDERING INFORMATION

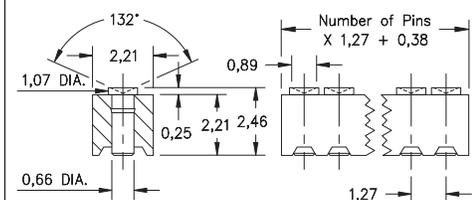
	Series 856...20-001	Flat face / Right Angle
<b>FIG. 1</b>	856-10-0	-20-001000 Specify number of pins 01-20
<b>FIG. 2</b>	Series 856...20-002	Concave face / Right Angle
	856-10-0	-20-002000 Specify number of pins 01-20
<b>FIG. 3</b>	Series 856...40-001	Flat face / Surface Mount
	856-10-0	-40-001000 Specify number of pins 01-20
<b>FIG. 4</b>	Series 856...40-002	Concave face / Surface Mount
	856-10-0	-40-002000 Specify number of pins 01-20
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>		
<b>SPECIFY PLATING CODE XX=</b>		10 ◆
Pin Plating		0,25µm Au

# SPRING-LOADED CONNECTORS

## SERIES 856, 857 • 1,27 GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS

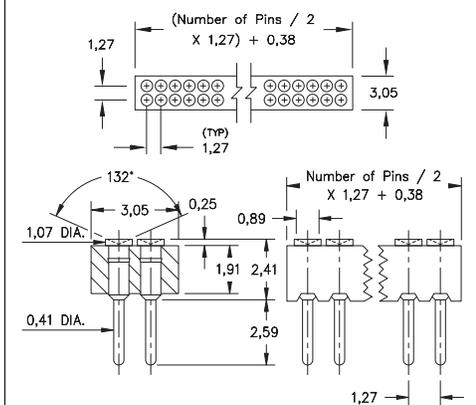


**FIG. 1**

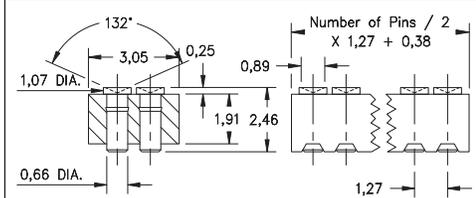


Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

**FIG. 2**



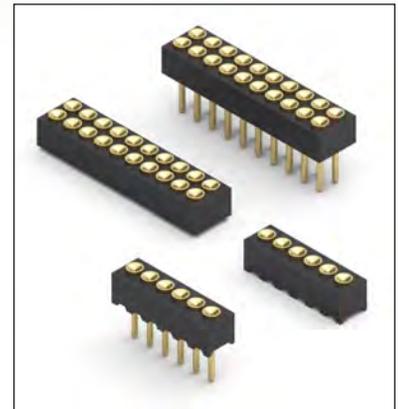
**FIG. 3**



Coplanarity 0,13. For Pin counts >40 positions, consult Technical Support.

**FIG. 4**

- Series 856 and 857 Target Connectors, SMT & through-hole, supplied in single and double row strips
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard 0,48 dia. spring pin plungers
- Target connectors use MM #1934 (through-hole) and #1936 (surface mount) pins. See page 223.2 for details
- Insulators are high temperature thermoplastic



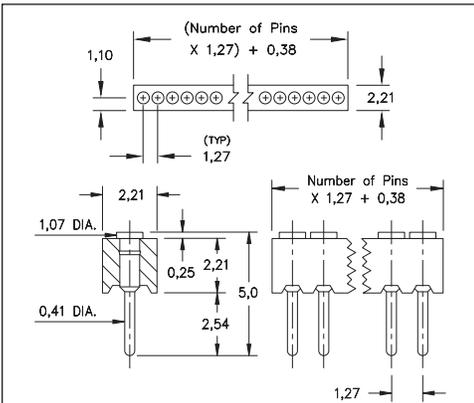
### ORDERING INFORMATION

	Series 856...10-002	Concave face / Solder Tails
<b>FIG. 1</b>	856-10-0	-10-002000
	Specify number of pins	01-20
<b>FIG. 2</b>	Series 856...30-002	Concave face / Surface Mount
	856-10-0	-30-002000
	Specify number of pins	02-20
<b>FIG. 3</b>	Series 857...10-002	Concave face / Solder Tails
	857-10-0	-10-002000
	Specify number of pins	04-40
<b>FIG. 4</b>	Series 857...30-002	Concave face / Surface Mount
	857-10-0	-30-002000
	Specify number of pins	04-40
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>		
<b>SPECIFY PLATING CODE XX=</b>		
Pin Plating	10  10 μ" Au	

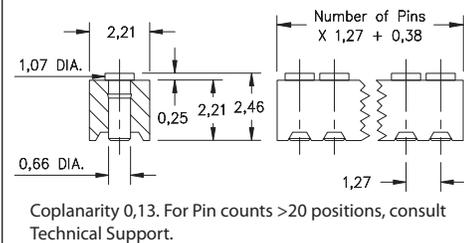


# SPRING-LOADED CONNECTORS

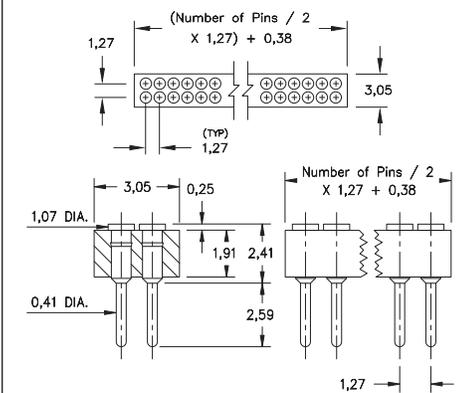
## SERIES 856, 857 • 1,27 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS



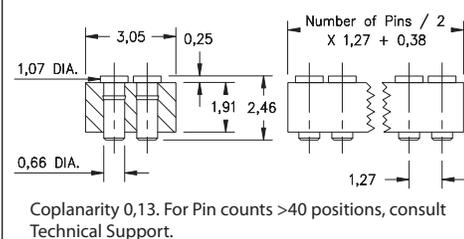
**FIG. 1**



**FIG. 2**

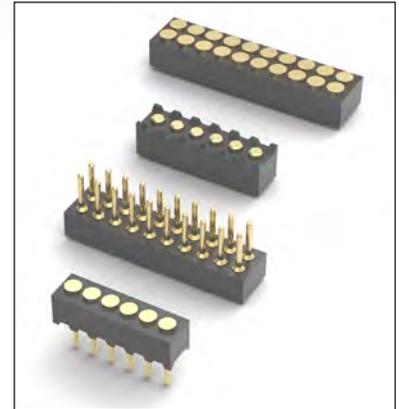


**FIG. 3**



**FIG. 4**

- Series 856 and 857 Target Connectors, SMT & through-hole, supplied in single and double row strips
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 0,48 dia. spring pin plungers
- Target connectors use MM #1933 (through-hole) and #1935 (surface mount) pins. See page 223.2 for details
- Insulators are high temperature thermoplastic

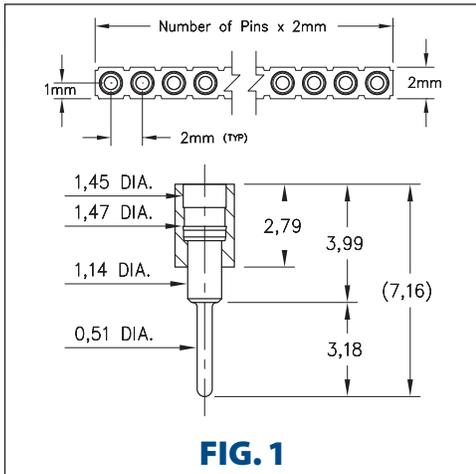


### ORDERING INFORMATION

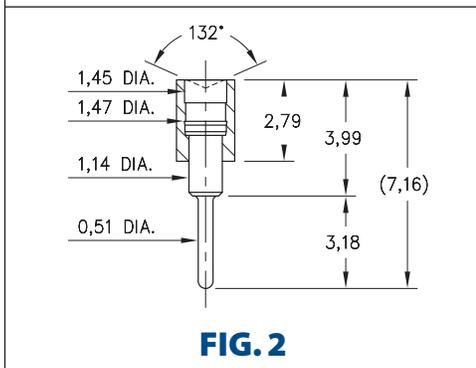
	Series 856...051	Flat face / Solder Tails
<b>FIG. 1</b>	856-10-0	-10-051000
	Specify number of pins	01-20
<b>FIG. 2</b>	Series 856...051	Flat face / Surface Mount
	856-10-0	-30-051000
	Specify number of pins	02-20
<b>FIG. 3</b>	Series 857...051	Flat face / Solder Tails
	857-10-0	-10-051000
	Specify number of pins	04-40
<b>FIG. 4</b>	Series 857...051	Flat face / Surface Mount
	857-10-0	-30-051000
	Specify number of pins	04-40
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>		
SPECIFY PLATING CODE XX=		10 ◆
Pin Plating		0,25µm Au

# SPRING-LOADED CONNECTORS

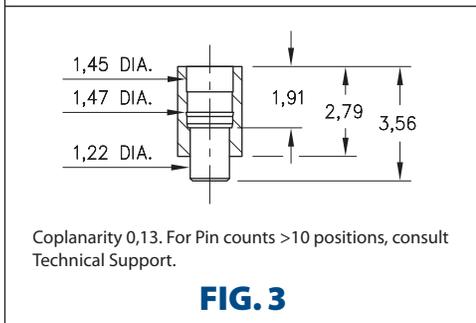
## SERIES 830 • 2mm GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS



**FIG. 1**

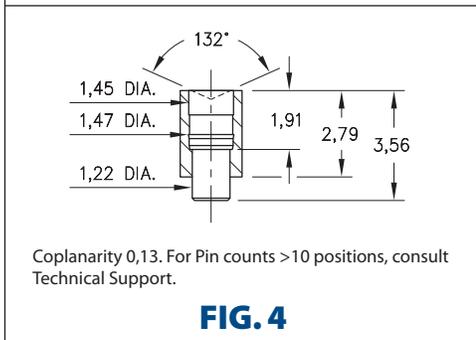


**FIG. 2**



**FIG. 3**

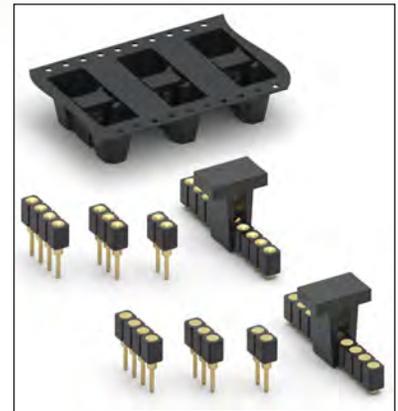
Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.



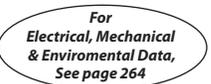
**FIG. 4**

Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

- Series 830 2mm Spring Target Connectors, supplied in single row strips
- Target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector. Available in both through-hole and SMT terminations with the choice of either flat or concave face contact surfaces. Concave face targets provide additional surface area for mating with our standard 0,81 diameter plungers
- Target connectors use MM #1949, #1950, #1951, and #1952 pins. See page 223.1 for details
- Insulators are high temperature thermoplastic

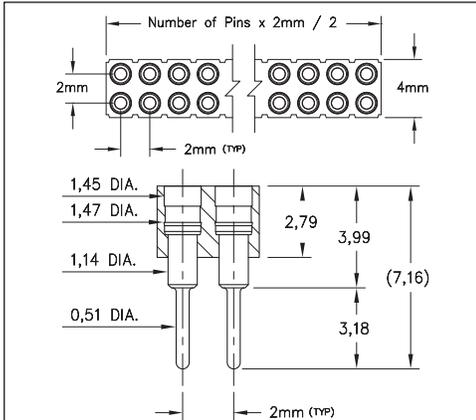


### ORDERING INFORMATION

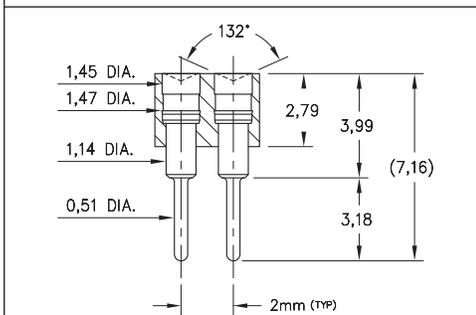
<b>FIG. 1</b>	<b>Series 830...003</b> <b>Flat face / Solder Tails</b>
	830-10-0__-10-003000 Specify number of pins      01-20
<b>FIG. 2</b>	<b>Series 830...004</b> <b>Concave face / Solder Tails</b>
	830-10-0__-10-004000 Specify number of pins      01-20
<b>FIG. 3</b>	<b>Series 830...30-003</b> <b>Flat face / Surface Mount</b>
	830-10-0__-30-003XXX Specify number or pins      02-10 Tube packaged = 000 Tape & reel packaged = 191 400 parts per 330mm reel
<b>FIG. 4</b>	<b>Series 830...30-004</b> <b>Concave face / Surface Mount</b>
	830-10-0__-30-004XXX Specify number or pins      02-10 Tube packaged = 000 Tape & reel packaged = 191 400 parts per 330mm reel
  	
<b>SPECIFY PLATING CODE XX=</b>	10 
Pin Plating 	0,25µm Au

# SPRING-LOADED CONNECTORS

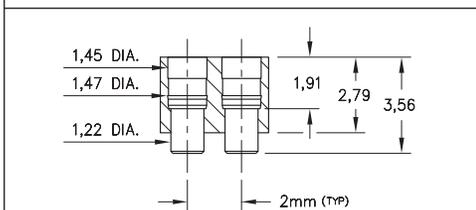
## SERIES 832 • 2mm GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS



**FIG. 1**

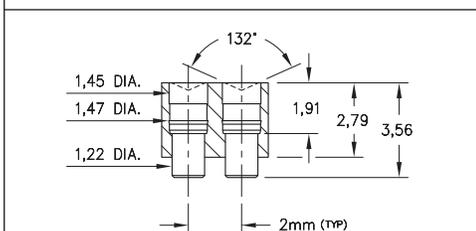


**FIG. 2**



**FIG. 3**

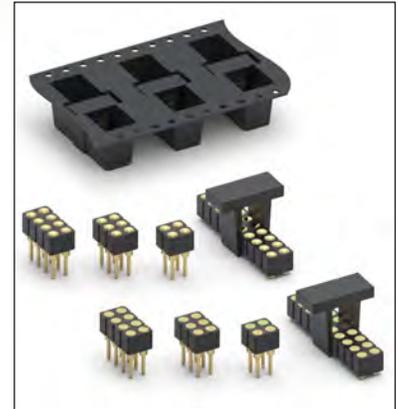
Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.



**FIG. 4**

Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

- Series 832 2mm Spring Target Connectors, supplied in double row strips
- Target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector. Available in both through-hole and SMT terminations with the choice of either flat or concave face contact surfaces. Concave face targets provide additional surface area for mating with our standard 0,81 diameter plungers
- Target connectors use MM #1949, #1950, #1951, and #1952 pins. See page 223.1 for details
- Insulators are high temperature thermoplastic

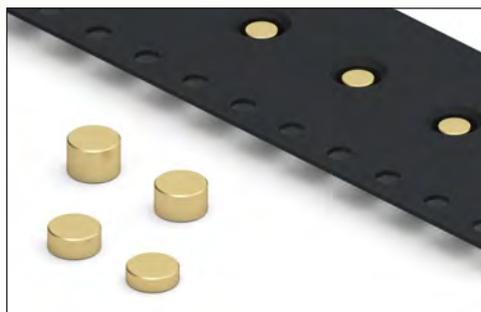


### ORDERING INFORMATION

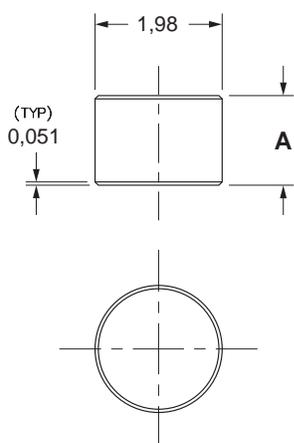
<b>FIG. 1</b>	<b>Series 832...003</b> <b>Flat face / Solder Tails</b>
	832-10-0__-10-003000 Specify number of pins ↑ 04-20
<b>FIG. 2</b>	<b>Series 832...004</b> <b>Concave face / Solder Tails</b>
	832-10-0__-10-004000 Specify number of pins ↑ 04-20
<b>FIG. 3</b>	<b>Series 832...30-003</b> <b>Flat face / Surface Mount</b>
	832-10-0__-30-003XXX Specify number or pins ↑ 04-20 Tube packaged = 000 Tape & reel packaged = 191 400 parts per 330mm reel
<b>FIG. 4</b>	<b>Series 832...30-004</b> <b>Concave face / Surface Mount</b>
	832-10-0__-30-004XXX Specify number or pins ↑ 04-20 Tube packaged = 000 Tape & reel packaged = 191 400 parts per 330mm reel
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Enviromental Data, See page 264</div> </div>	
<b>SPECIFY PLATING CODE XX=</b>	10 ◆
Pin Plating	0,25µm Au

# SPRING-LOADED CONNECTORS

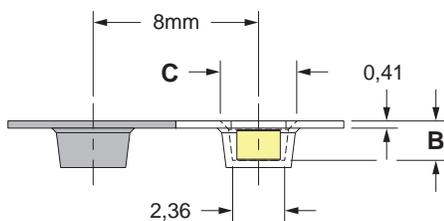
## SERIES 1578 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



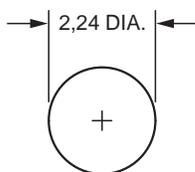
Series 1578 (Target Disc)



Series 1578 (Tape Pocket Details)



Series 1578 (Suggested footprint layout)



- The 1578-X-57-15-00-00-03-0 Surface mount disc is 1,98 in diameter and available in four heights from 0,64 to 1,4 +/-0,051. Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1578-X's are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

### ORDERING INFORMATION

#### Series 1578 (Tape & Reel Packaged)

1578-X-57-15-00-00-03-0

Specify contact style (0-3)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	0,64	0,89	3,05	7,200
1	0,89	1,14	3,3	6,000
2	1,14	1,4	3,33	5,125
3	1,4	1,65	3,38	4,000

XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX= 15

Pin Plating  0,25 µm Au

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 385 or 360, 1/2 Hard

**Dimensions:** Inches

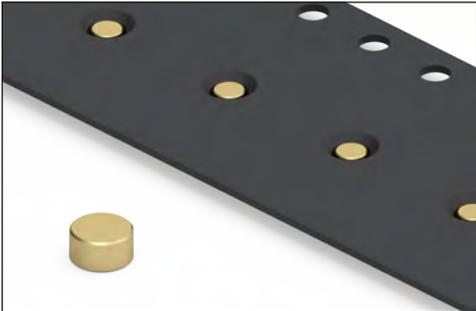
**Tolerances On:** Lengths: ± 0,051  
Diameters: ± 0,025  
Angles: ± 2°

RoHS-2  
2011/65/EU



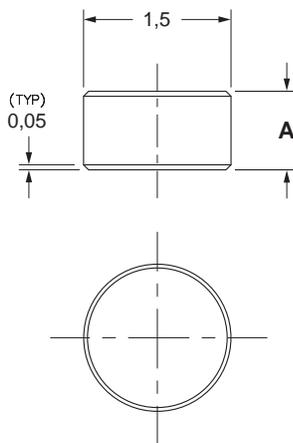
# SPRING-LOADED CONNECTORS

## SERIES 1559 • LOW PROFILE TARGET DISCS • SURFACE MOUNT

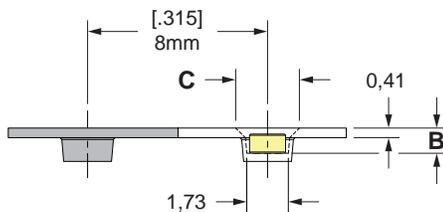


- The 1559-1-57-15-00-00-03-0 Surface mount disc is 1,5 in diameter. Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1559-1 are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

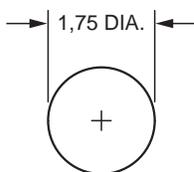
Series 1559 (Target Disc)



Series 1559 (Tape Pocket Details)



Series 1559 (Suggested footprint layout)



### ORDERING INFORMATION

#### Series 1559 (Tape & Reel Packaged)

1559-X-57-15-00-00-03-0

Specify contact style (1)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
1	0,80	1,04	2,64	6,000

XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	15			
Pin Plating	0,25 µm Au			

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 385 or 360, 1/2 Hard

**Dimensions:** Inches

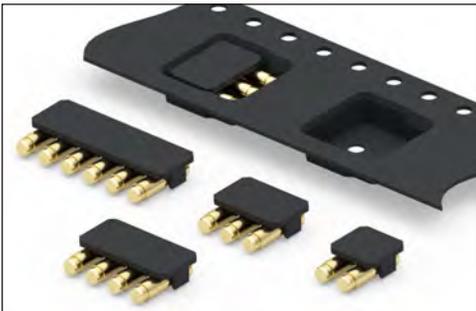
**Tolerances On:** Lengths: ± 0,051  
Diameters: ± 0,025  
Angles: ± 2°

RoHS-2  
2011/65/EU



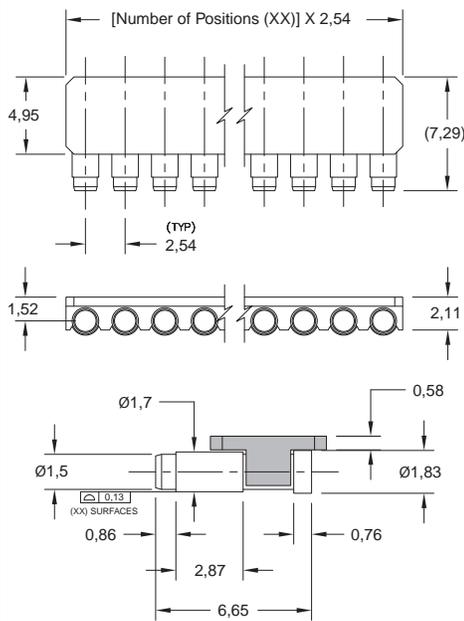
# SPRING-LOADED CONNECTORS

## SERIES 319 • 2,54 GRID HSMT TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

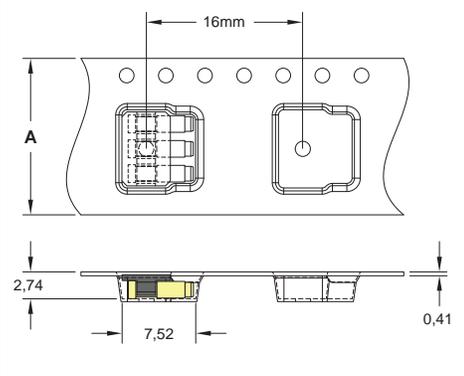


- Series 319 HSMT Spring Target Connectors, supplied in single row strips
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. This series is offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- These target connectors provide a low profile, horizontal surface mount connection to the PCB and are designed to mate with standard 2,54 pitch spring loaded connectors. They are ideal for daisy chaining P.C.B.'s when mated with SLC 810-22-1XX-40-005191 or for mating boards in a perpendicular orientation
- The 319 series is packaged on tape & reel - 16, 24, 32 or 44 mm wide x 16 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D

### Series 319 (HSMT Target)



### Series 319 (Tape Pocket Details)



## ORDERING INFORMATION

### Series 319 (Tape & Reel Packaged)

319-10-1\_\_-40-080001  
Specify number of pins      02-10

Number of Pins	Tape Width Size (A)	Quantity per Reel
2	16mm	1,450
3	16mm	1,450
4	24mm	1,450
5	24mm	1,450
6	24mm	1,450
7	32mm	1,450
8	32mm	1,450
9	44mm	1,450
10	44mm	1,450

XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	 0,25µm Au			

### Technical Specifications

#### Materials:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard  
Pin Finish: 0,25µm Gold over Nickel  
Insulator: High temperature Nylon 46, rated UL94 V-0

#### Electrical:

Insulation resistance: 10,000MΩ min.  
Dielectric strength: 700Vrms min.

RoHS-2  
2011/65/EU

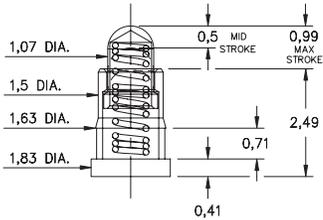


# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS • SURFACE MOUNT

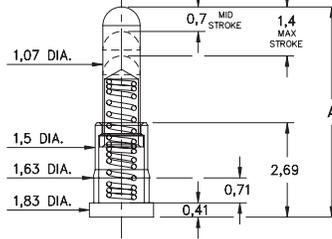
### 0900-0

**0900-0-15-20-76-14-11-0**  
 "Legacy P/N 0900-0-00-00-00-00-11-0"  
 Short stroke, Surface mount. Also available  
 on 16mm wide carrier tape: 2,000 parts per  
 330mm reel. See pg. 28.2 for Tape & Reel details



### 0900-1 → 4,8 72 or 75

**0900-X-15-20-7X-14-11-0**  
 Standard stroke, Surface mount. Also available on 16mm  
 wide carrier tape: 1,700 parts per 330mm reel (0900-1) or  
 24mm wide carrier tape: 1,100 parts per 330mm reel (0900-2)  
 and (0900-3). See page 28.2 for Tape & Reel details

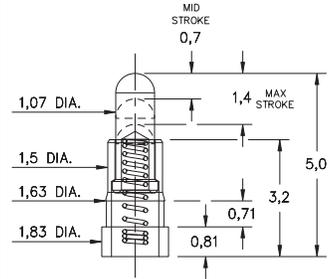


Basic Part Number	Length A
0900-1	4,5
0900-2	5,0
0900-3	5,51
0900-4	5,99
* 0900-8	3,94

\* 0900-8 has a 0,5 Mid Stroke & 0,99 Max. Stroke  
 Order as:  
 0900-8-15-20-76-14-11-0  
 "Legacy Part Number"  
 0900-X-00-00-00-00-11-0

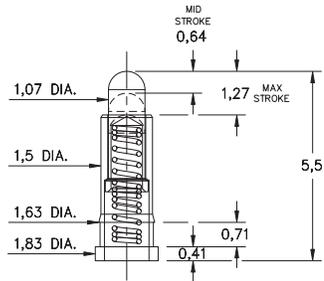
### 0934

**0934-0-15-20-74-14-26-0**  
 Standard stroke, Surface mount



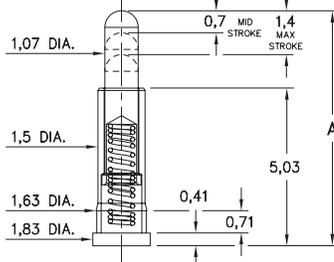
### 0936

**0936-0-15-20-7X-14-11-0**  
 Standard stroke, Surface mount



### 0907-0 → 9

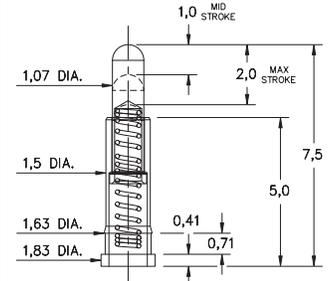
**0907-X-15-20-75-14-11-0**  
 Standard stroke, Surface mount, Mid profile  
 Also available with insulated sleeve, see page 19.4



Basic Part Number	Length A
0907-0	6,48
0907-1	6,99
0907-2	7,49
0907-3	8,0
0907-4	8,51
0907-5	8,89
0907-6	9,4
0907-7	9,91
0907-8	10,41
0907-9	10,92

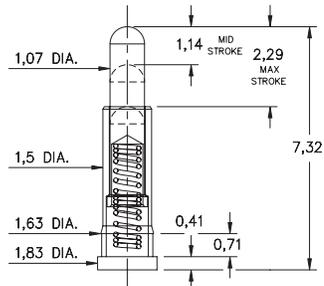
### 0928

**0928-0-15-20-77-14-11-0**  
 Long stroke, Surface mount



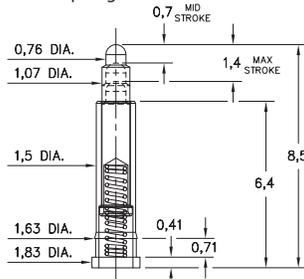
### 0913

**0913-0-15-20-77-14-11-0**  
 Long stroke, Surface mount, Mid profile



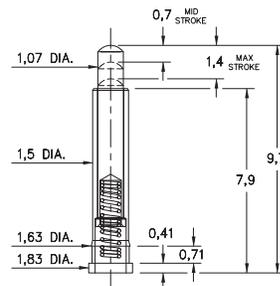
### 0925

**0925-0-15-20-7X-14-11-0**  
 Standard stroke, Surface mount  
 Reduced plunger



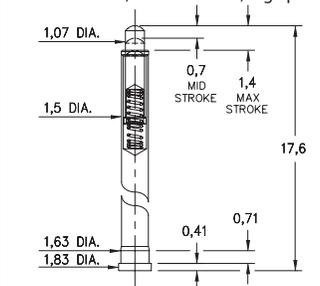
### 0927

**0927-0-15-20-7X-14-11-0**  
 Standard stroke, Surface mount, Mid profile



### 0905

**0905-0-15-20-7X-14-11-0**  
 "Legacy P/N 0905-0-00-00-00-00-11-0"  
 Standard stroke, Surface mount, High profile



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Beryllium Copper  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
 Diameters: ± 0,051  
 Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.

#### Environmental Specifications:

**Operating temperature range:**  
 -55/+125° C (discontinuous)

**74, 75, 76, 77 Springs are not interchangeable**

Order Code: 09XX - X - 15 - 20 - 7X - 14 - XX - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
74	0,7	1,4	50 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	1,0	60 g	25 g
77	1,14	2,29	60 g	25 g



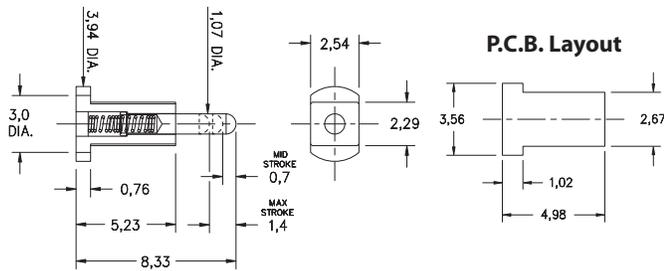
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS

### 0967

0967-0-15-20-7X-14-11-0

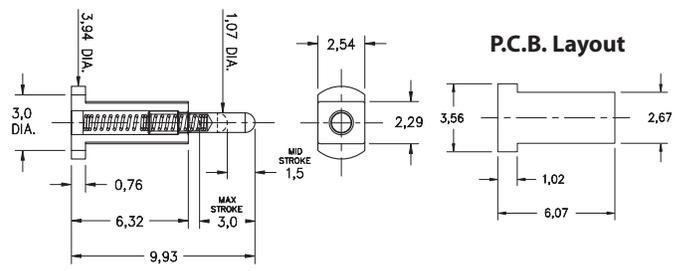
Standard stroke, Horizontal surface mount  
Also available on 16mm wide carrier tape: 2,800 parts per 330mm reel  
See page 28.2 for Tape & Reel details



### 0987

0987-0-15-20-89-14-11-0

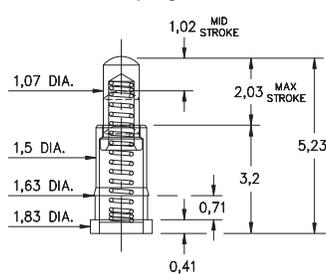
Long stroke, Horizontal surface mount  
Also available on 24mm wide carrier tape: 2,800 parts per 330mm reel  
See page 28.6 for Tape & Reel details



### 0964

0964-0-15-20-85-14-11-0

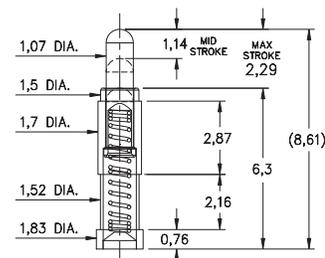
Long stroke, Surface mount, Mid profile  
\* Stainless steel spring



### 7966-0

7966-0-15-20-77-14-11-0

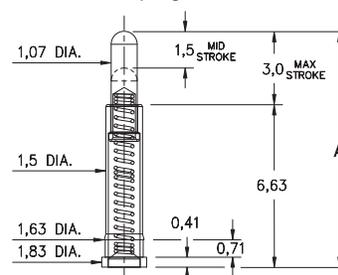
Long stroke, Surface mount. Also available in HSMT connector series: 1,450 parts per 330mm reel. Order as: 810-22-0XX-40-005191



### 0919-X

0919-X-15-20-89-14-11-0

3mm Long stroke, Surface mount  
\* Stainless steel spring

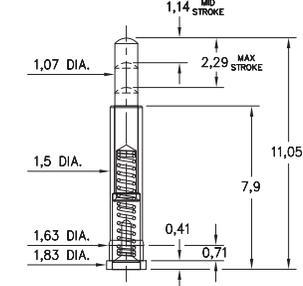


Basic Part Number	Length A
0919-0	9,63
0919-2	10,64

### 0937

0937-0-15-20-77-14-11-0

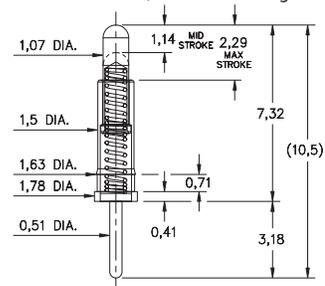
Long stroke, Surface mount



### 7913

7913-0-15-20-77-14-11-0

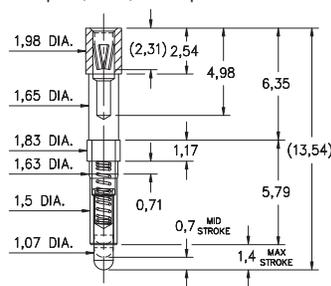
Long stroke  
Solder mount in 0,61 min. mounting hole



### 0959

0959-0-54-20-7X-14-11-0

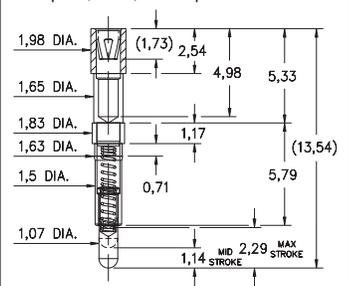
Receptacle spring pin, Standard stroke  
Accepts 0,51 - 0,81 Dia. pins



### 7928

7928-0-54-20-77-14-11-0

Receptacle spring pin, Long stroke  
Accepts 0,94 - 1,09 Dia. pins



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** BeCu or Stainless Steel 302 \*  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
 Diameters: ± 0,051  
 Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:** -55/+125° C

**75, 77, 85, 89 Springs are not interchangeable**

Order Code: X9XX - X - 15 - 20 - XX - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
77	1,14	2,29	60 g	25 g
* 85	1,02	2,03	60 g	25 g
* 89	1,5	3,0	100 g	25 g



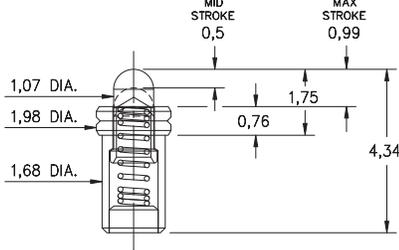
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS

### 0921-0

#### 0921-0-15-20-76-14-11-0

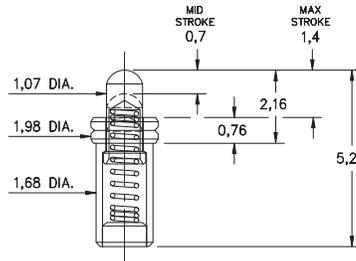
Ultra low profile, Short stroke. Solder mount in 1,78 min. mounting hole  
Also available on 24mm wide carrier tape: 1,700 parts per 330mm reel  
See page 28.3 for Tape & Reel details



### 0921-1

#### 0921-1-15-20-7X-14-11-0

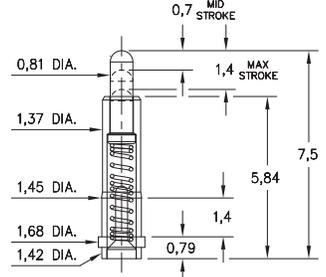
Low profile, Standard stroke. Solder mount in 1,78 min. mounting hole  
Also available on 24mm wide carrier tape: 1,500 parts per 330mm reel  
See page 28.3 for Tape & Reel details



### 0911

#### 0911-0-15-20-86-14-11-0

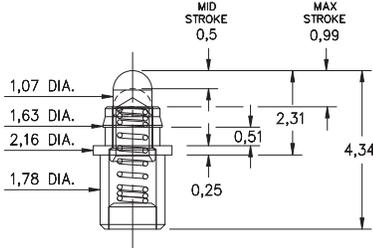
Standard stroke, Surface mount  
\*Stainless steel spring



### 0926-0

#### 0926-0-15-20-76-14-11-0

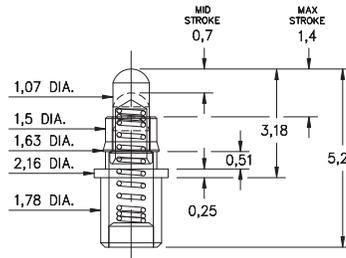
Low profile, Short stroke. Solder mount in 1,88 min. mounting hole  
Also available on 16mm wide carrier tape: 1,700 parts per 330mm reel  
See page 28.4 for Tape & Reel details



### 0926-1

#### 0926-1-15-20-7X-14-11-0

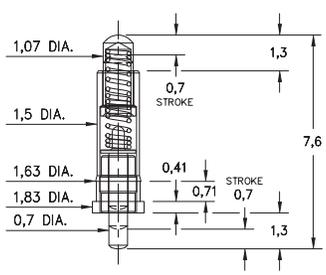
Low profile, Standard stroke. Solder mount in 1,88 min. mounting hole  
Also available on 24mm wide carrier tape: 1,450 parts per 330mm reel  
See page 28.4 for Tape & Reel details



### 0980

#### 0980-0-15-20-7X-14-11-0

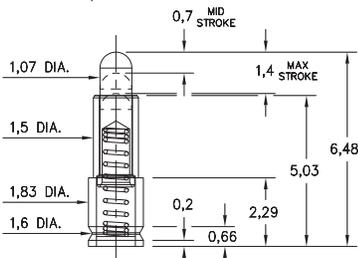
Double action, 1,4 Combined stroke  
Mount between parallel circuit boards



### 0977

#### 0977-0-15-20-7X-14-11-0

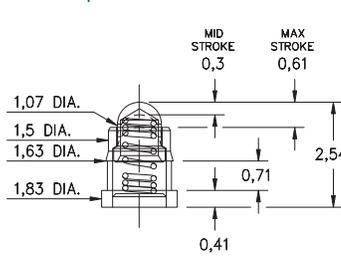
Standard stroke, Surface mount  
Also available on 24mm wide carrier tape: 1,100 parts per 330mm reel  
See page 28.4 for Tape & Reel details



### 0965

#### 0965-0-15-20-80-14-11-0

Ultra low profile, Surface mount, \*Stainless steel spring  
Also available on 16mm wide carrier tape: 3,000 parts per 330mm reel  
See page 28.4 for Tape & Reel details



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** BeCu or Stainless Steel 302 \*  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
-55/+125° C (discontinuous)

**75, 76, 80, 86 Springs are not interchangeable**

#### Order Code: 09XX - X - 15 - 20 - XX - 14 - 11 - 0

#### Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g
* 80	0,3	0,61	115 g	25 g
* 86	0,7	1,4	100 g	25 g



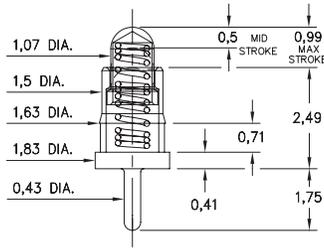
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS • THROUGH-HOLE MOUNT

### 0906-0

0906-0-15-20-76-14-11-0

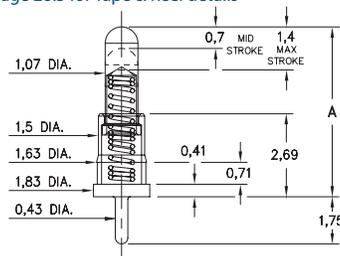
Short stroke, Solder mount in 0,51 min. mounting hole. Also available with insulated sleeve, see page 19.5



### 0906-1↔4,8

0906-X-15-20-7X-14-11-0

Standard stroke, Solder mount in 0,51 min. mounting hole. Also available on 24mm wide carrier tape: 0906-1 & 0906-2 1,200 parts per reel. 0906-3 & 0906-4 600 parts per reel. See page 28.3 for Tape & Reel details



Basic Part Number	Length A
0906-1	4,5
0906-2	5,0
0906-3	5,51
0906-4	5,99
*0906-8	3,94

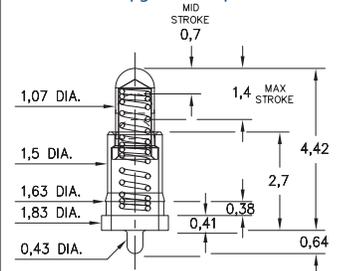
\*0906-8 has a 0,5 Mid. Stroke & 0,99 Max. Stroke

Also available with insulated sleeve, See page 19.5

### 0930

0930-0-15-20-7X-14-11-0

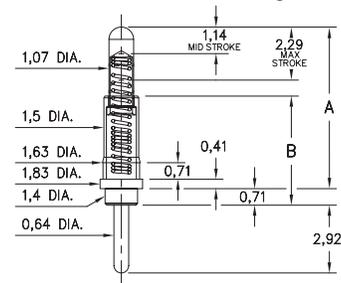
Solder mount in 0,51 min. mounting hole. Also available on carrier tape: 1,500 parts per 330mm reel. See pg. 28.5 for Tape & Reel details



### 0914

0914-0-15-20-77-14-11-0

Long stroke Solder mount in 0,74 min. mounting hole

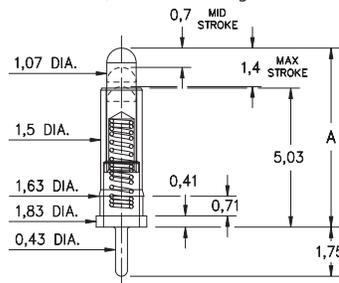


Basic Part Number	Length A	Length B
0914-0	6,96	4,7
0914-1	7,72	6,15
0914-2	8,48	6,91
0914-3	9,25	7,67

### 0908-0↔9

0908-X-15-20-7X-14-11-0

Standard stroke Solder mount in 0,51 min. mounting hole

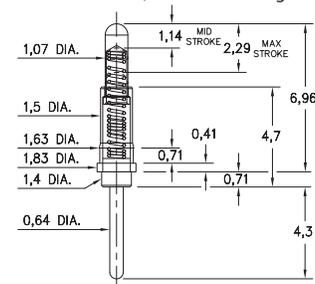


Basic Part Number	Length A
0908-0	6,48
0908-1	6,99
0908-2	7,49
0908-3	8,0
0908-4	8,51
0908-5	8,89
0908-6	9,4
0908-7	9,91
0908-8	10,41
0908-9	10,92

### 0932

0932-0-15-20-77-14-11-0

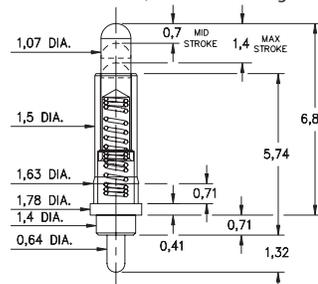
Long stroke Solder mount in 0,74 min. mounting hole



### 0901

0901-0-15-20-7X-14-11-0

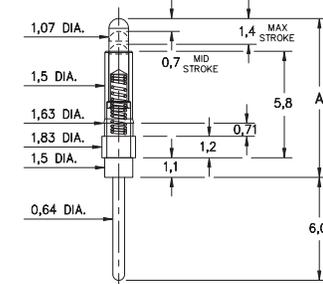
"Legacy P/N 0901-0-00-00-00-00-11-0" Solder mount in 0,74 min. mounting hole



### 0929

0929-X-15-20-7X-14-11-0

Standard stroke Solder mount in 0,74 min. mounting hole



Basic Part Number	Length A
0929-0	8,64
0929-7	12,2

#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Beryllium Copper  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
 Diameters: ± 0,051  
 Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
 -55/+125° C (discontinuous)

**75, 76, 77 Springs are not interchangeable**

Order Code: 09XX - X - 15 - 20 - 7X - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g
77	1,14	2,29	60 g	25 g



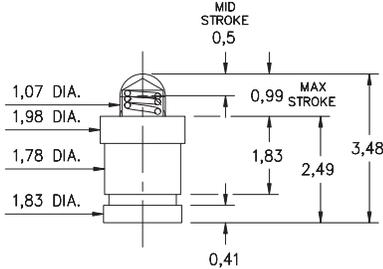
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS • SURFACE MOUNT

### 0910-0

0910-0-57-20-76-14-11-0

Short stroke, Surface mount  
Packaged on 16mm wide carrier tape: 2,000 parts per 330mm reel  
See page 28.5 for Tape & Reel details

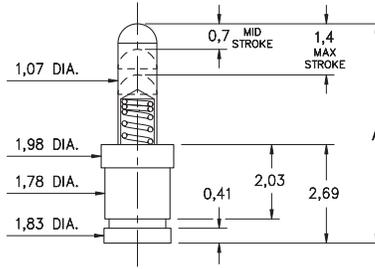


### 0910-1↔4

72 or 75

0910-X-57-20-7X-14-11-0

Standard stroke, Surface mount  
Packaged on carrier tape. See chart for tape width & qty. per reel  
See page 28.5 for Tape & Reel details



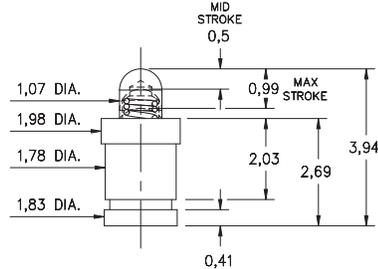
Basic Part Number	Length A
0910-1	4,5
0910-2	5,0
0910-3	5,51
0910-4	5,99

Basic Part Number	Tape Width	Quantity per Reel
0910-1	16mm	1,500
0910-2	24mm	1,100
0910-3	24mm	1,100
0910-4	24mm	1,100

### 0910-8

0910-8-57-20-76-14-11-0

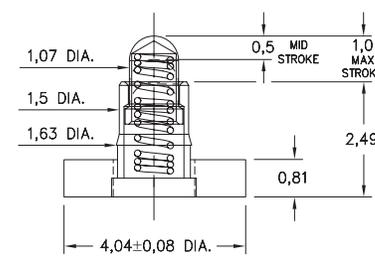
Short stroke, Surface mount  
Packaged on 16mm wide carrier tape: 1,800 parts per 330mm reel  
See page 28.5 for Tape & Reel details



### 0990-0

0990-0-50-20-76-14-11-0

Short stroke, Surface mount, Large base  
Also available on 16mm wide carrier tape: 2,150 parts per 330mm reel  
See page 28.4 for Tape & Reel details

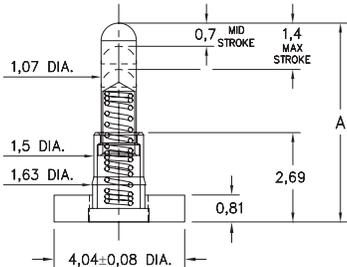


### 0990-1↔4

72 or 75

0990-X-50-20-7X-14-11-0

Standard stroke, Surface mount, Large base  
Also available on 16mm wide carrier tape: 850 parts per 330mm reel  
ONLY 0990-4 currently available. See page 28.4 for Tape & Reel details



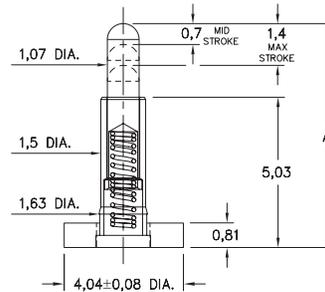
Basic Part Number	Length A
0990-1	4,5
0990-2	5,0
0990-3	5,51
0990-4	5,99

### 0997-0↔9

72 or 75

0997-X-50-20-7X-14-11-0

Standard stroke, Surface mount, Large base, Mid profile



Basic Part Number	Length A
0997-0	6,48
0997-1	6,99
0997-2	7,49
0997-3	8,0
0997-4	8,51
0997-5	8,89
0997-6	9,4
0997-7	9,91
0997-8	10,41
0997-9	10,92

#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Beryllium Copper  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
-55/+125° C (discontinuous)

**75, 76 Springs are not interchangeable**

Order Code: 09XX - X - XX - 20 - XX - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g



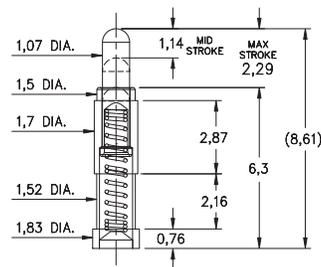
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS

### 7966-0

7966-0-15-20-77-14-11-0

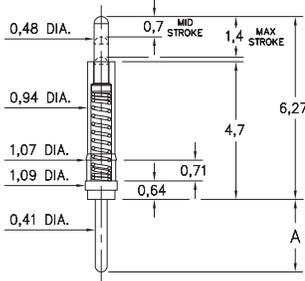
Long stroke, Surface mount. Also available in HSMT connector series: 1,450 parts per 330mm reel. Order as: 810-22-0XX-40-005191



### 0985

0985-X-15-20-71-14-11-0

Standard stroke  
Solder mount in 0,49 min. mounting hole



Basic Part Number    Length A

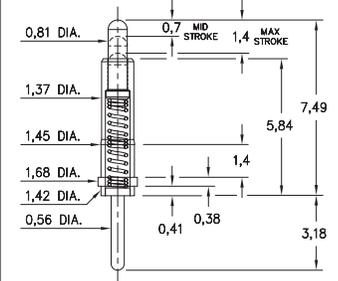
0985-0	2,62
0985-1	3,81
0985-2	4,83

\*\* Durability: Up to 100,000 cycles

### 7911

7911-0-15-20-86-14-11-0

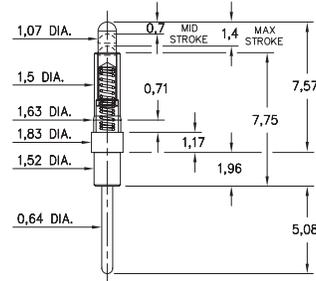
Standard stroke, suitable for 2mm spacing  
\* Stainless steel spring



### 0922

0922-0-15-20-7X-14-11-0

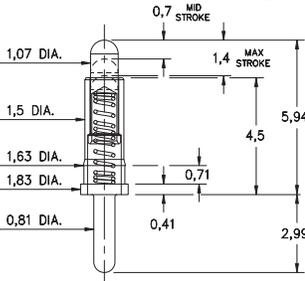
Standard stroke  
Solder mount in 0,74 min. mounting hole



### 0956

0956-0-15-20-7X-14-11-0

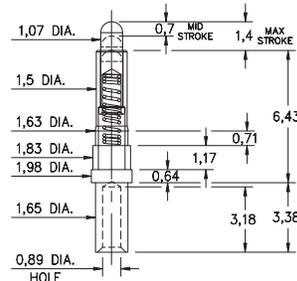
Standard stroke  
Solder mount in 0,89 min. mounting hole



### 0962

0962-0-15-20-7X-14-11-0

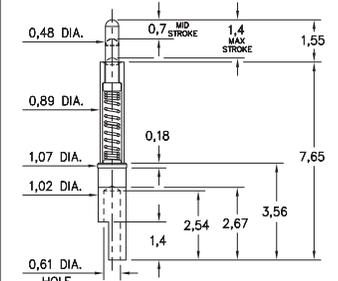
Standard stroke, Wire crimp termination  
for wire sizes 24 AWG Max. / 28 AWG Min.



### 0955

0955-0-15-20-71-14-11-0

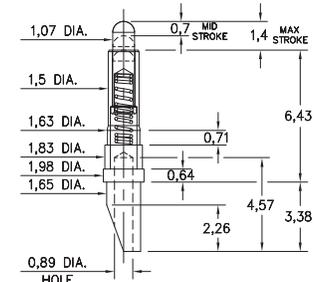
Standard stroke, Soldercup  
Accepts wire sizes up to 26 AWG



### 0933

0933-0-15-20-7X-14-11-0

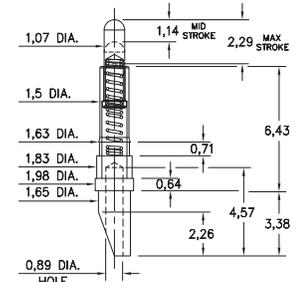
Standard stroke, Soldercup  
Accepts wire sizes up to 24 AWG



### 0947

0947-0-15-20-77-14-11-0

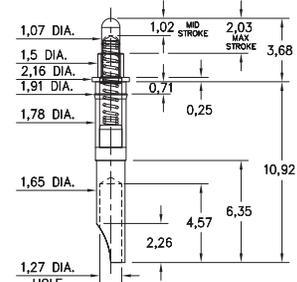
Long stroke, Soldercup  
Accepts wire sizes up to 24 AWG



### 0973

0973-0-15-20-77-14-11-0

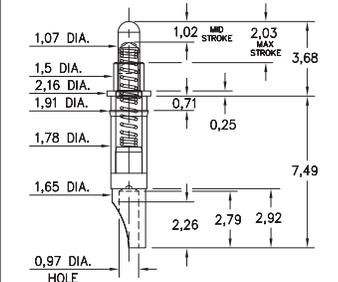
Long stroke, Soldercup  
Accepts wire sizes up to 20 AWG



### 7973

7973-0-15-20-77-14-11-0

Long stroke, Soldercup  
Accepts wire sizes up to 22 AWG



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** BeCu or Stainless Steel 302 \*  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
 Diameters: ± 0,051  
 Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles \*\*  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
 -55/+125° C (discontinuous)

**71, 75, 77, 86 Springs are not interchangeable**

Order Code: X9XX - X - 15 - 20 - XX - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
71	0,7	1,4	60 g	15 g
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
77	1,14	2,29	60 g	25 g
* 86	0,7	1,4	100 g	25 g



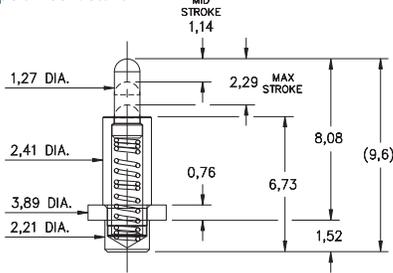
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS • POWER SPRING PINS

### 0851

0851-0-15-20-82-14-11-0

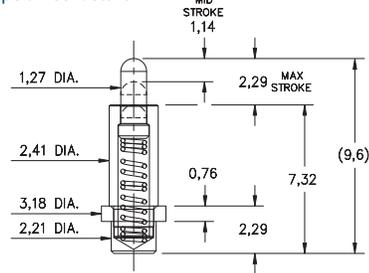
Solder Mount in 2,29 min. mounting hole or Surface Mount, 2,21Ø minimum pad  
Also available on 24mm wide carrier tape: 540 parts per 330mm reel  
See page 28.6 for Tape & Reel details



### 0853

0853-0-15-20-82-14-11-0

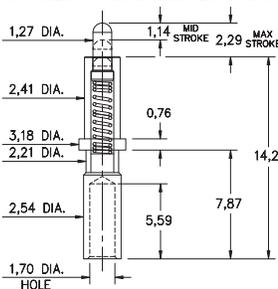
Solder Mount in 2,29 min. mounting hole or Surface Mount, 2,21 Ø minimum pad  
Also available on 24mm wide carrier tape: 500 parts per 330mm reel  
See page 28.6 for Tape & Reel details



### 0855

0855-0-15-20-82-14-11-0

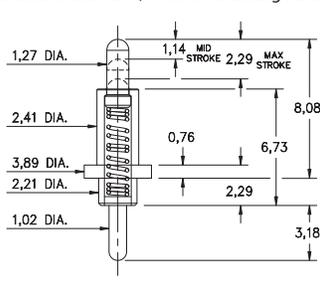
Power spring pin, Wire crimp termination for wire sizes 16 AWG Max. / 20 AWG Min.



### 0856

0856-0-15-20-82-14-11-0

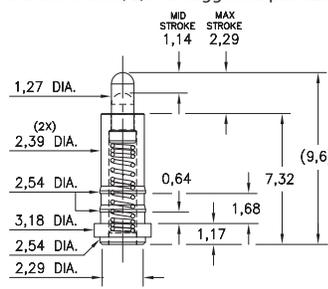
Power spring pin  
Solder Mount in 1,14 min. mounting hole



### 0859

0859-0-15-20-82-14-11-0

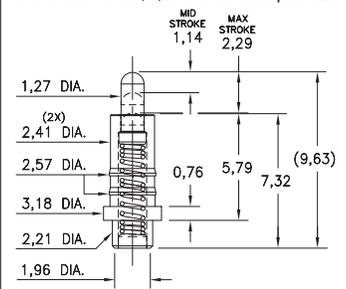
Power spring pin  
Surface Mount, 2,54 Ø suggested pad size



### 0873

0873-0-15-20-82-14-11-0

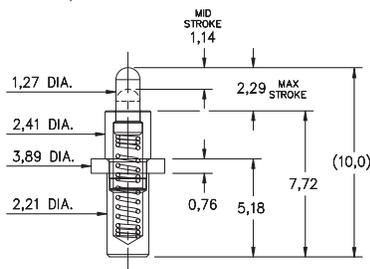
Solder Mount in 2,29 min. mounting hole or Surface Mount, 2,21 Ø minimum pad size



### 0850

0850-0-15-20-83-14-11-0

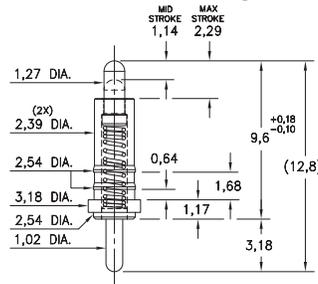
Power spring pin, Solder Mount in 2,29 min. mounting hole  
Also available on 32mm wide carrier tape: 500 parts per 330mm reel  
See page 28.6 for Tape & Reel details



### 0858

0858-0-15-20-82-14-11-0

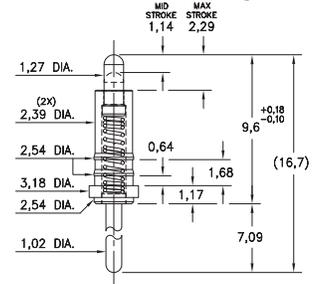
Power spring pin  
Solder Mount in .045 min. mounting hole



### 0878

0878-0-15-20-82-14-11-0

Power spring pin  
Solder Mount in .045 min. mounting hole



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Stainless Steel 302  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Rated Current (Free air):**  
Continuous 9 amps @ 10° C temperature rise  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
-55/+125° C (discontinuous)

**82, 83 Springs are not interchangeable**

Order Code: 08XX - X - XX - 20 - 8X - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
82	1,14	2,29	120 g	25 g
83	1,14	2,29	120 g	25 g



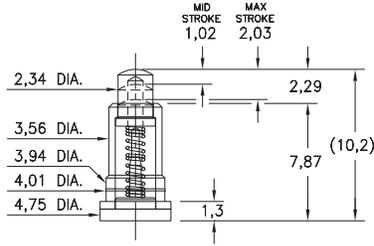
# SPRING-LOADED PINS

## DISCRETE SPRING-LOADED CONTACTS • POWER SPRING PINS

### 0871

0871-0-15-20-82-14-11-0

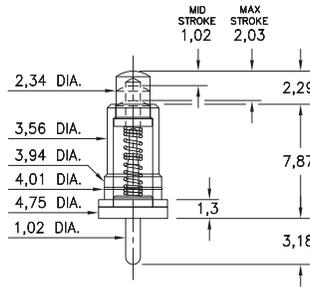
Long stroke, Surface mount \*Force @ Mid. Stroke 100g  
Also available on 24mm wide carrier tape: 330 parts per 330mm reel  
See page 28.6 for Tape & Reel details



### 0861

0861-0-15-20-82-14-11-0

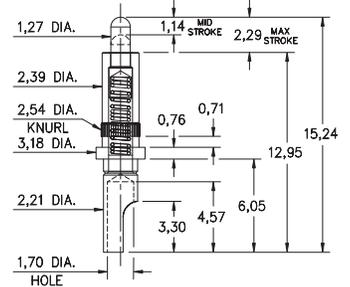
Solder Mount in 1,09 min. mounting hole  
\*Force @ Mid. Stroke 100g



### 0868

0868-0-15-20-82-14-11-0

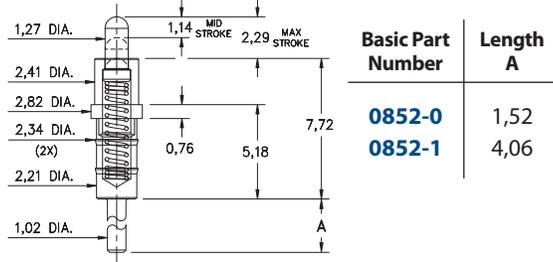
Long stroke, Soldercup  
Accepts wire sizes up to 16 AWG



### 0852

0852-X-15-20-83-14-11-0

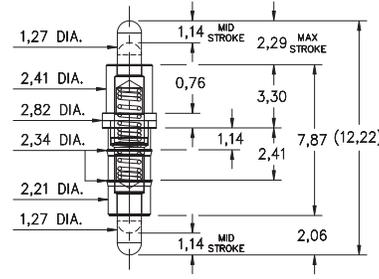
Power spring pin, Solder mount in 1,14 min. mounting hole  
Also available on 44mm wide carrier tape: 425 parts per 330mm reel  
See page 28.6 for Tape & Reel details



### 0880

0880-1-15-20-82-14-11-0

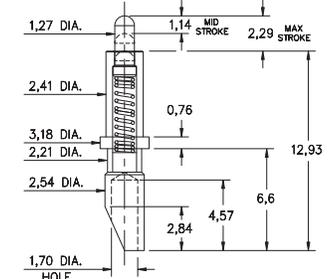
Double action, 2,29 Max. combined stroke  
Mount between parallel circuit boards



### 0854

0854-0-15-20-82-14-11-0

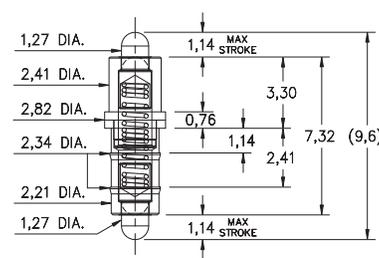
Power spring pin, Soldercup  
Accepts wire sizes up to 1,45 Dia.



### 0881

0881-1-15-20-82-14-11-0

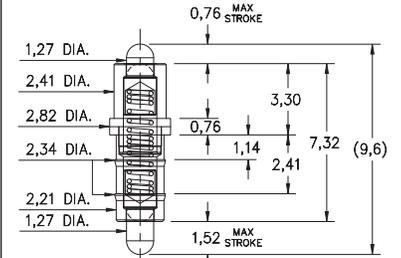
Double action, 2,29 Max. combined stroke  
Mount between parallel circuit boards



### 0881

0881-2-15-20-82-14-11-0

Double action, 2,29 Max. combined stroke  
Mount between parallel circuit boards



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Stainless Steel 302  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Rated Current (Free air):**  
Continuous 9 amps @ 10° C temperature rise  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
-55/+125° C (discontinuous)

**Springs are not interchangeable**

Order Code: 08XX - X - XX - 20 - 8X - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
82	1,14	2,29	120 g	25 g
83	1,14	2,29	120 g	25 g



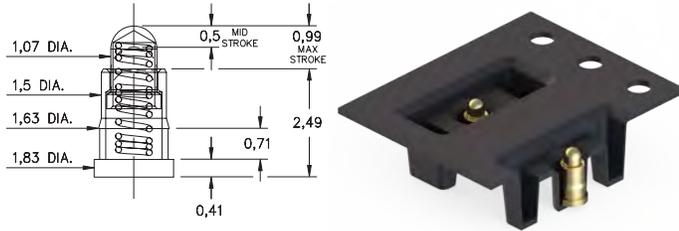
# SPRING-LOADED PINS

## SPRING-LOADED PINS ON TAPE & REEL PACKAGING

### 0900-0

0900-0-57-20-76-14-11-0

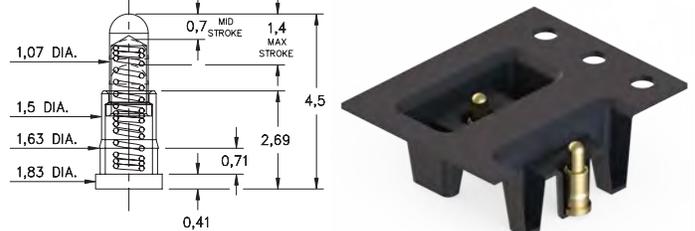
Short stroke, Surface mount  
16mm wide carrier tape: 2,000 parts per 330mm reel.



### 0900-1

0900-1-57-20-7X-14-11-0

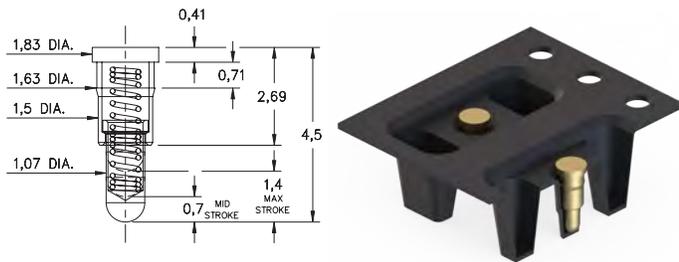
Standard stroke, Surface mount  
16mm wide carrier tape: 1,500 parts per 330mm reel.



### 0900-1

0900-1-59-20-7X-14-11-0

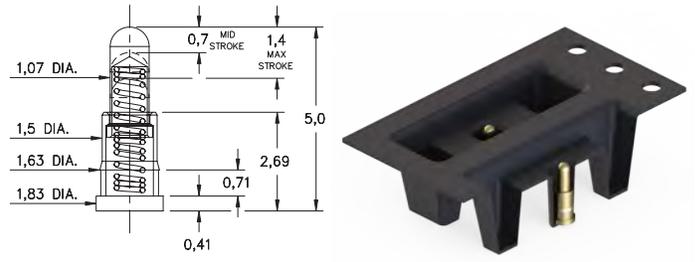
Standard stroke, Surface mount  
16mm wide carrier tape: 1,700 parts per 330mm reel.



### 0900-2

0900-2-57-20-7X-14-11-0

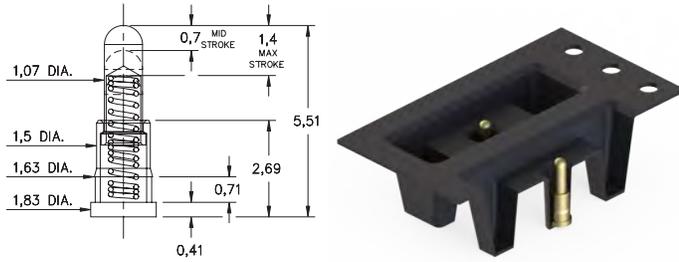
Standard stroke, Surface mount  
24mm wide carrier tape: 1,100 parts per 330mm reel.



### 0900-3

0900-3-57-20-7X-14-11-0

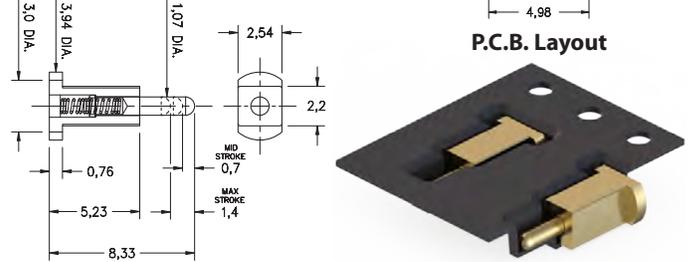
Standard stroke, Surface mount  
24mm wide carrier tape: 1,100 parts per 330mm reel.



### 0967

0967-0-58-20-7X-14-11-0

Standard stroke, Horizontal surface mount  
16mm wide carrier tape: 2,800 parts per 330mm reel.



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Beryllium Copper  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ±0,15  
Diameters: ±0,051  
Angles: ±2°



#### Mechanical & Electrical Specifications:

**Durability:** 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:** -55/+125°C

**75, 76 Springs are NOT interchangeable**  
**72, 75 Springs are interchangeable**

Order Code: 09XX - X - 5X - 20 - 7X - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g



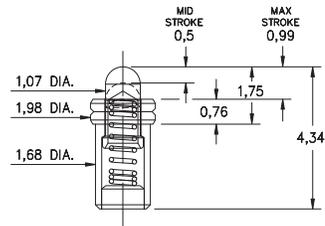
# SPRING-LOADED PINS

## SPRING-LOADED PINS ON TAPE & REEL PACKAGING

### 0921-0

0921-0-57-20-76-14-11-0

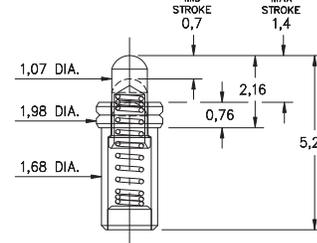
Ultra low profile, Short stroke. Solder mount in 1,78 min. mounting hole  
24mm wide carrier tape; 1,700 parts per 330mm reel.



### 0921-1

0921-1-57-20-7X-14-11-0

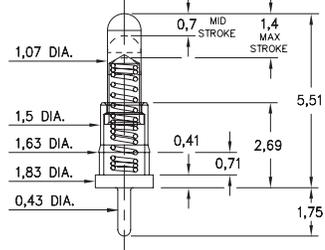
Low profile, Standard stroke. Solder mount in 1,78 min. mounting hole  
24mm wide carrier tape; 1,500 parts per 330mm reel.



### 0906-3

0906-3-57-20-7X-14-11-0

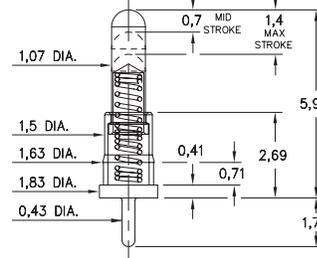
Standard stroke, Solder mount in .020 min mounting hole  
24mm wide carrier tape; 600 parts per 330mm reel.



### 0906-4

0906-4-57-20-7X-14-11-0

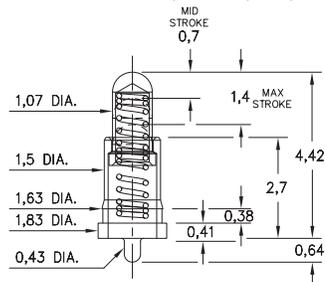
Standard stroke, Solder mount in .020 min mounting hole  
24mm wide carrier tape; 600 parts per 330mm reel.



### 0930

0930-0-57-20-7X-14-11-0

Standard stroke, Solder mount in 0,51 min. mounting hole  
24mm wide carrier tape; 1,500 parts per 330mm reel.



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** BeCu or Stainless Steel 302 \*  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
 Diameters: ± 0,051  
 Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.

#### Environmental Specifications:

**Operating temperature range:**  
 -55/+125° C (discontinuous)

**75, 76 Springs are NOT interchangeable**  
**72, 75 Springs are interchangeable**

Order Code: 09XX - X - 57 - 20 - XX - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g
*80	0,3	0,61	115 g	25 g



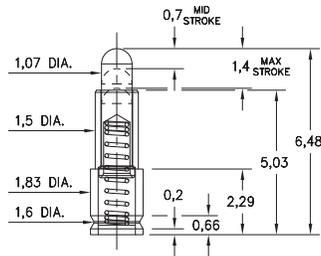
# SPRING-LOADED PINS

## SPRING-LOADED PINS ON TAPE & REEL PACKAGING

### 0977

0977-0-57-20-7X-14-11-0

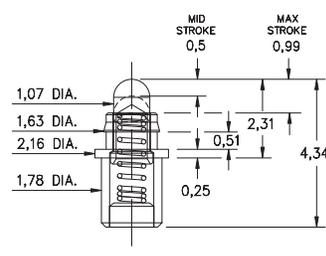
Standard stroke, Surface mount  
24mm wide carrier tape: 1,100 parts per 330mm reel.



### 0926-0

0926-0-57-20-76-14-11-0

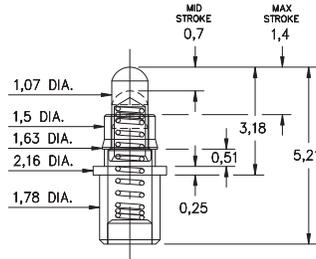
Low Profile, Short Stroke. Solder mount in 1,88 min. mounting hole:  
16mm wide carrier tape: 1,700 parts per 330mm reel.



### 0926-1

0926-1-57-20-7X-14-11-0

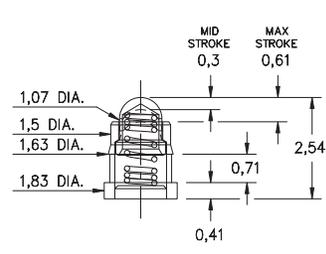
Low profile, Standard stroke. Solder mount in 1,88 min. mounting hole  
24mm wide carrier tape: 1,450 parts per 330mm reel.



### 0965

0965-0-57-20-80-14-11-0

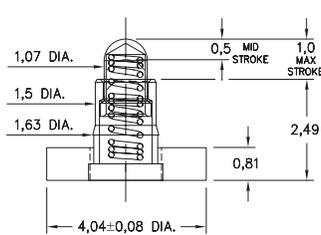
Ultra low profile, Surface mount, \* Stainless steel spring  
16mm wide carrier tape: 3,000 parts per 330mm reel.



### 0990-0

0990-0-57-20-76-14-11-0

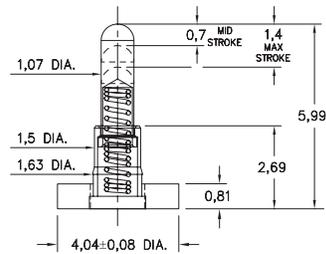
Short stroke, Surface mount, Large base  
16mm wide carrier tape: 2,150 parts per 330mm reel.



### 0990-4

0990-4-57-20-7X-14-11-0

Standard stroke, Surface mount, Large base  
16mm wide carrier tape: 850 parts per 330mm reel.



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** BeCu or Stainless Steel 302 \*  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** Up to 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:**  
-55/+125° C (discontinuous)

**75, 76, 80 Springs are NOT interchangeable**  
**72, 75 Springs are interchangeable**

Order Code: 09XX - X - 57 - 20 - XX - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g
*80	0,3	0,61	115 g	25 g



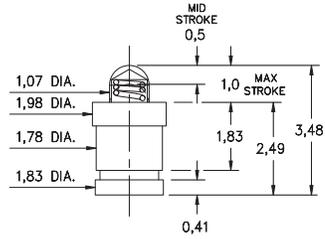
# SPRING-LOADED PINS

## SPRING-LOADED PINS ON TAPE & REEL PACKAGING

### 0910-0

0910-0-57-20-76-14-11-0

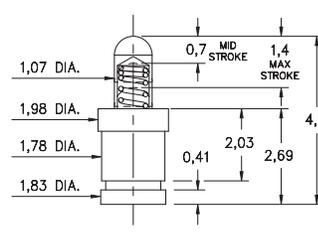
Short stroke, Surface mount  
16mm wide carrier tape; 2,000 parts per 330mm reel.



### 0910-1

0910-1-57-20-7X-14-11-0

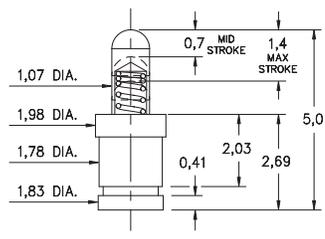
Standard stroke, Surface mount  
16mm wide carrier tape; 1,500 parts per 330mm reel.



### 0910-2

0910-2-57-20-7X-14-11-0

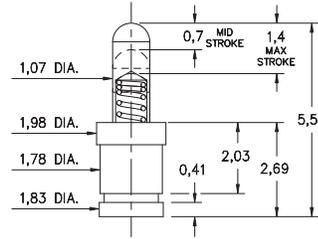
Standard stroke, Surface mount  
24mm wide carrier tape; 1,100 parts per 330mm reel.



### 0910-3

0910-3-57-20-7X-14-11-0

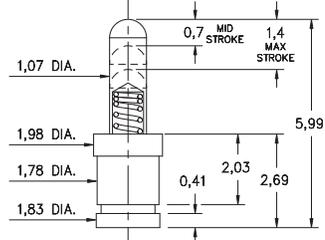
Standard stroke, Surface mount  
24mm wide carrier tape; 1,100 parts per 330mm reel.



### 0910-4

0910-4-57-20-7X-14-11-0

Standard stroke, Surface mount  
24mm wide carrier tape; 1,100 parts per 330mm reel.



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Beryllium Copper  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:** -55/+125° C  
**75, 76 Springs are NOT interchangeable**  
**72, 75 Springs are interchangeable**

Order Code: 09XX - X - 57 - 20 - 7X - 14 - 11 - 0

Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
72	0,7	1,4	35 g	15 g
75	0,7	1,4	60 g	25 g
76	0,5	0,99	60 g	25 g



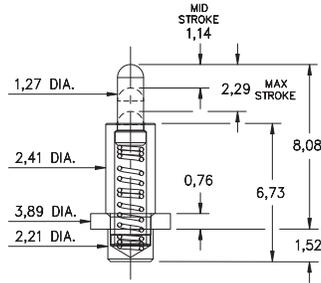
# SPRING-LOADED PINS

## SPRING-LOADED PINS ON TAPE & REEL PACKAGING

### 0851

**0851-0-57-20-82-14-11-0**

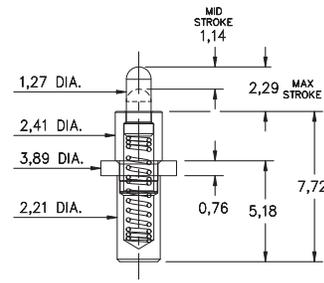
Solder Mount in 2,29 min. mounting hole or Surface Mount, 2,21 Ø minimum pad  
24mm wide carrier tape: 540 parts per 330mm reel.



### 0850

**0850-0-57-20-83-14-11-0**

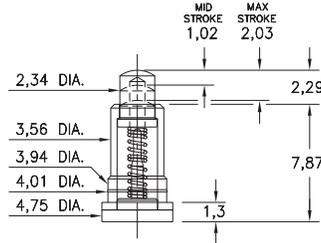
Power spring pin, Solder Mount in 2,29 min. mounting hole  
32mm wide carrier tape: 500 parts per 330mm reel.



### 0871

**0871-0-57-20-82-14-11-0**

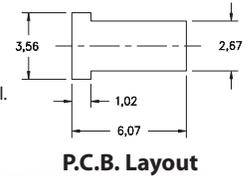
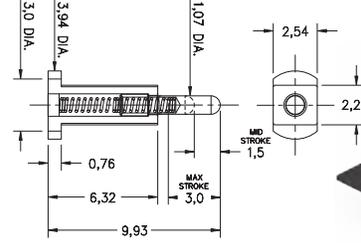
Long stroke, Surface mount \*Force @ Mid. Stroke 100g  
24mm wide carrier tape: 330 parts per 330mm reel.



### 0987

**0987-0-58-20-89-14-11-0**

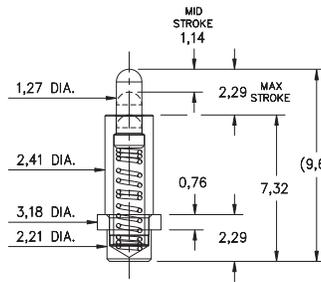
Long stroke, Horizontal surface mount  
24mm wide carrier tape: 2,800 parts per 330mm reel.



### 0853

**0853-0-57-20-82-14-11-0**

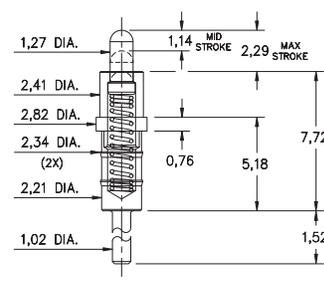
Solder Mount in 2,29 min. mounting hole or Surface Mount, 2,21 Ø minimum pad  
24mm wide carrier tape: 500 parts per 330mm reel



### 0852

**0852-0-57-20-83-14-11-0**

Power spring pin, Solder Mount in 1,14 min. mounting hole  
44mm wide carrier tape: 425 parts per 330mm reel



#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Stainless Steel 302  
**Sleeve & Plunger Finish:** 0,5µm Gold over Nickel  
**Spring Finish:** 0,25µm Gold over Nickel  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,15  
Diameters: ± 0,051  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** 1,000,000 cycles  
**Current Rating:** 2A continuous, 3A peak  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:** -55/+125° C

**82, 83, 89 Springs are not interchangeable**

**Order Code: 08XX - 0 - 5X - 20 - 8X - 14 - 11 - 0**

**Spring Number**

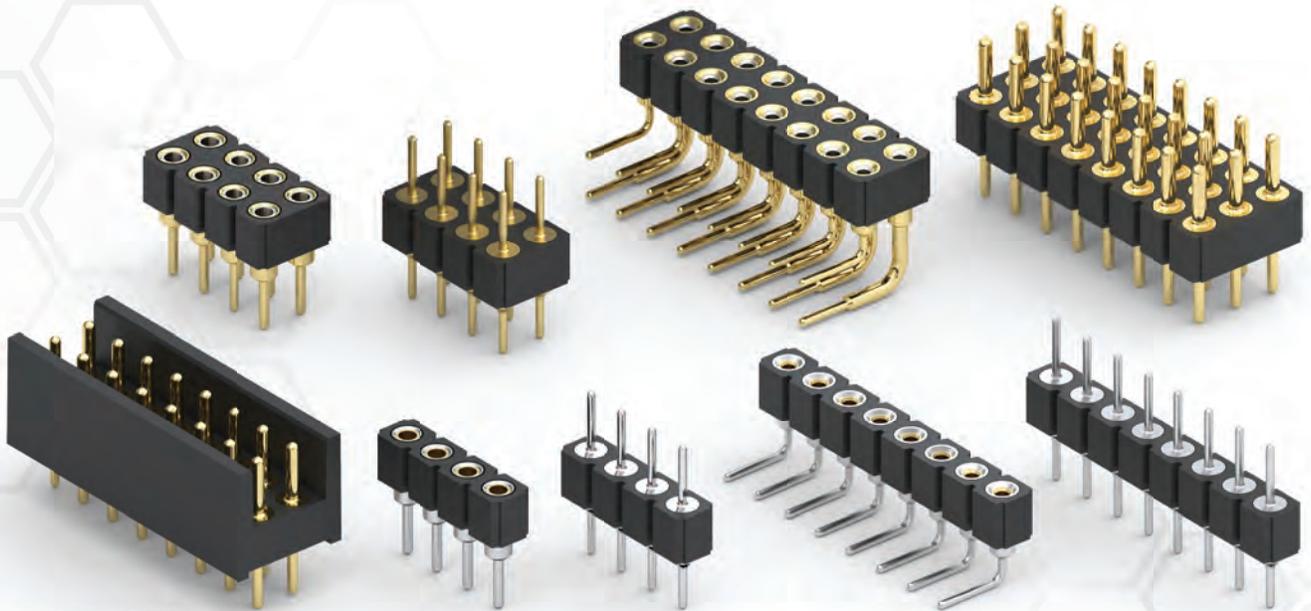
Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
<b>82</b>	1,14	2,29	120 g	25 g
<b>83</b>	1,14	2,29	120 g	25 g
<b>89</b>	1,5	3,0	85 g	25 g





WWW.MILL-MAX.COM

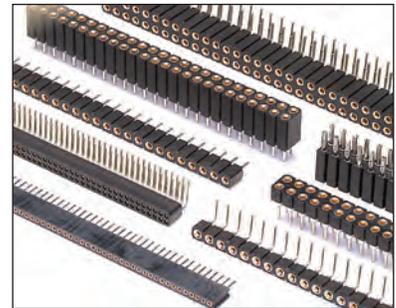
# BOARD-TO-BOARD INTERCONNECTS





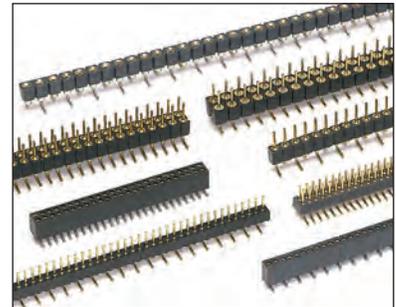
WWW.MILL-MAX.COM

**MILL-MAX HEADER AND SOCKET INTERCONNECTS OFFER AN IDEAL SOLUTION TO THE BOARD-TO-BOARD INTERCONNECT CHALLENGES THAT DESIGN ENGINEERS FACE EVERY DAY.** We offer a variety of options to accommodate everything from space-saving, fine-pitch requirements, to larger, more robust applications in which products are subjected to harsh environments including significant shock and vibration. By mating different combinations of headers and sockets, a wide range of board-to-board spacing can be achieved.



**MILL-MAX CONNECTORS ARE AVAILABLE IN THE FOLLOWING CONFIGURATIONS:**

- Pluggable using a mating socket and header
- Permanent by soldering a through-hole header to both boards
- Fine pitch from 2mm down to 1mm pin-to-pin spacing
- Surface mount headers and sockets
- Right angle
- Multiple board stacking using Organic Fiber Plug® pass-through sockets
- Horizontal "Z-Bend" SMT
- Wire Termination: Soldercup, Turret, Slotted
- Solderless Press-fit



# CUSTOM INSULATORS

## NEED A SOCKET OR HEADER IN A UNIQUE CONFIGURATION?

**Mill-Max can manufacture custom insulators to your exacting specifications, saving you money for high volume runs.**

When your product's in high demand, the most cost-effective way to produce a custom connector insulator is to mold it. Mill-Max can mold\* insulators out of PCT, Nylon, PPS or LCP, depending on the environmental, mechanical, electrical and thermal requirements of your application.

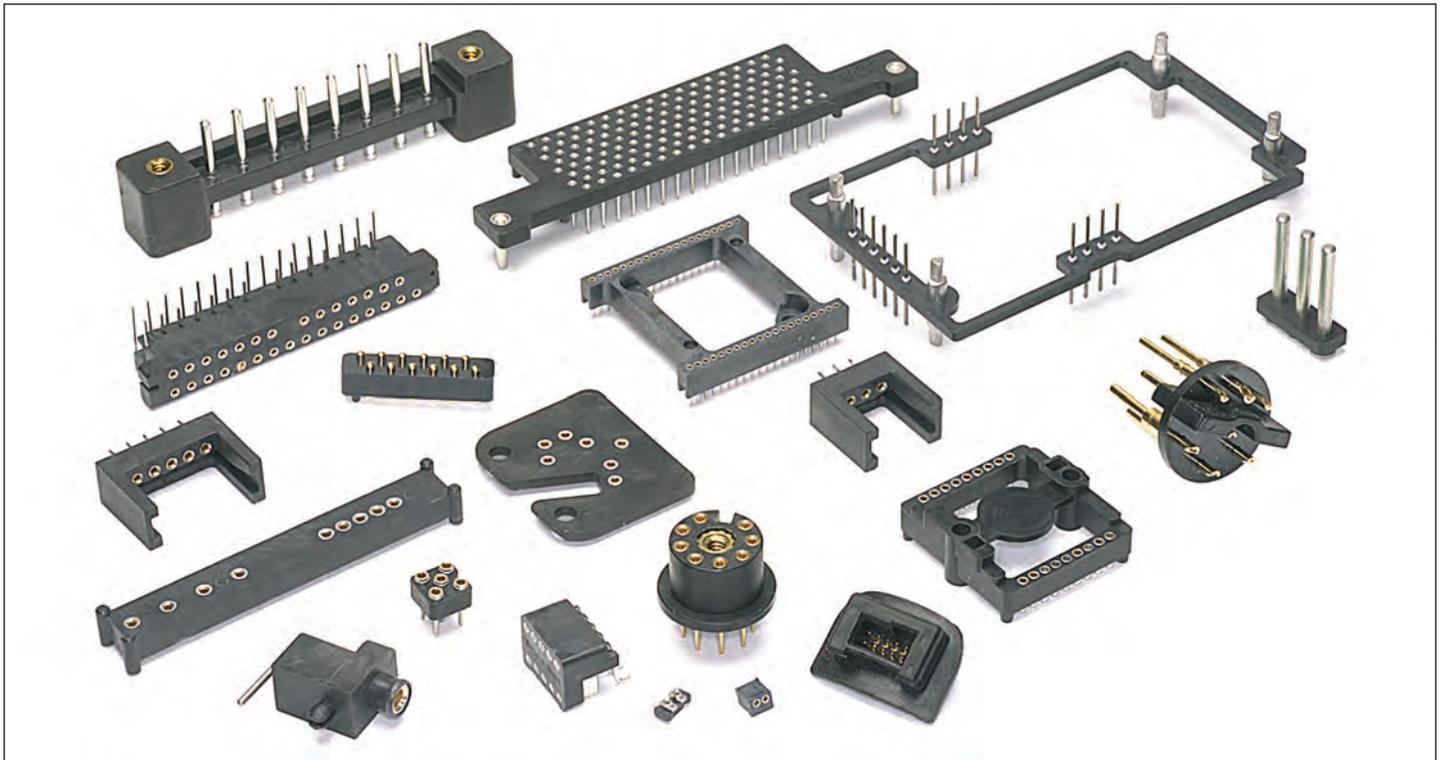
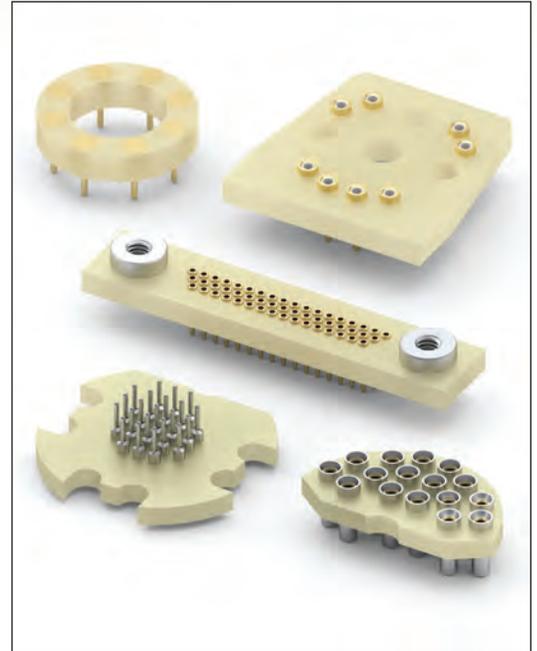
If you have a high-volume connector application, Mill-Max can provide a superior molded insulator solution that will keep your costs in check.

In addition, Mill-Max's utilization of FR-4 epoxy material, in combination with standard pins/receptacles, makes this kind of customization a quick and efficient process for both prototype and volume production.

FR-4 insulators offered in standard thicknesses of 0,51, 0,79, 1,19, 1,57, 2,36 and 3,18 are best suited for single plane designs. Mill-Max can turn around a socket, header or spring pin connector typically in 2-4 weeks or less! (Provided that a standard receptacle or pin with a press-fit feature is used.)

Please contact us with your custom application by completing our Custom Product Worksheet on page 247.

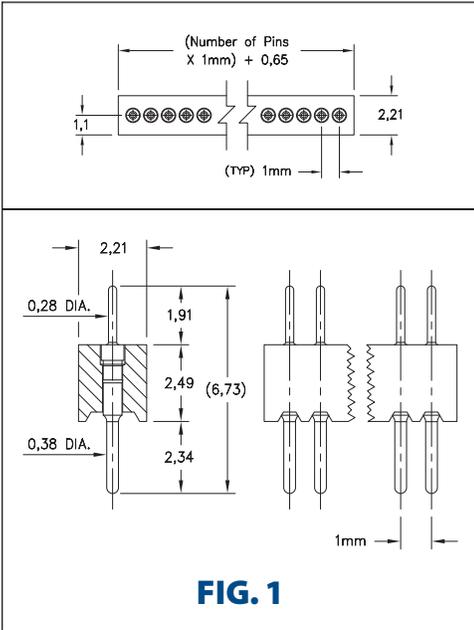
\* A one-time partial tooling charge is assessed in order to cover the costs associated with building a custom mold tool.



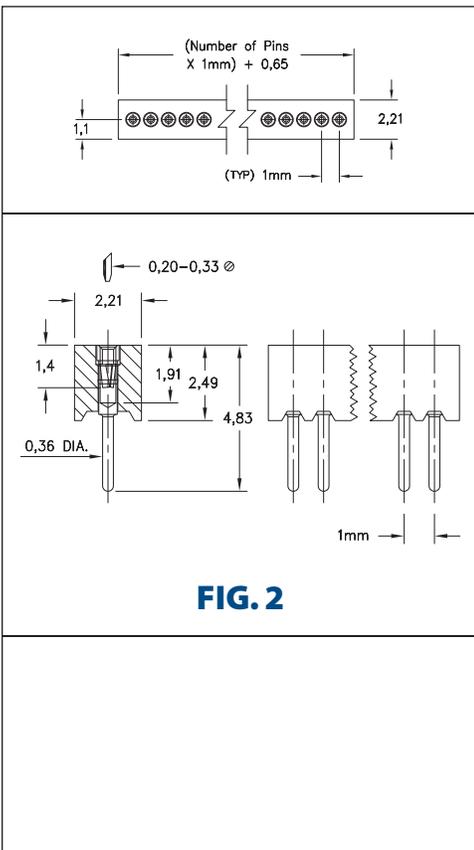


# INTERCONNECTS

## SERIES 860 & 861 • 1mm GRID HEADERS AND SOCKETS • SINGLE ROW STRIPS

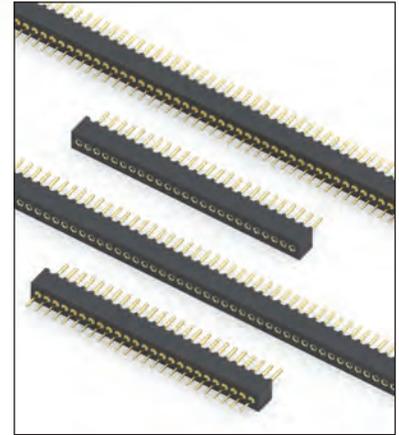


**FIG. 1**



**FIG. 2**

- Series 860 headers and Series 861 sockets are single row, 1mm pitch interconnects rated at 2 amps
- Series 860 headers have 0,38 diameter solder tails and 0,28 diameter pluggable pins (MM #3039) See page 208 for details
- Series 861 sockets have 0,36 diameter solder tails (MM #0439). See page 156 for details
- Both 860 headers and 861 sockets are available in 2-50 position strips
- The header and socket provide a mated height of 4,98 for board stacking applications
- Insulators are high temperature thermoplastic, suitable for most soldering processes, and feature standoffs to promote solder flow

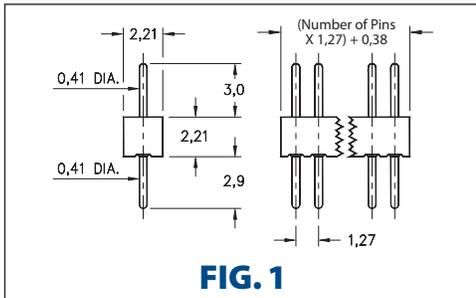


### ORDERING INFORMATION

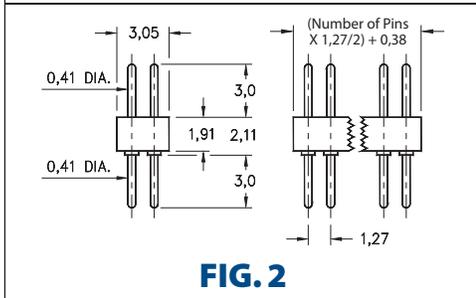
FIG. 1	Series 860...002		Single Row 1mm Header			
		860-10-0		-10-002000		
	Specify number of pins		02-50			
	SPECIFY PLATING CODE XX=	10				
	Pin Plating	0,25µm Au				
FIG. 2	Series 861...002		Single Row 1mm Socket			
		861-13-0		-10-002000		
	Specify number of pins		02-50			
	SPECIFY PLATING CODE XX=	13				
	Sleeve (Pin)	0,25µm Au				
	Contact (Clip)	0,76µm Au				

# INTERCONNECTS

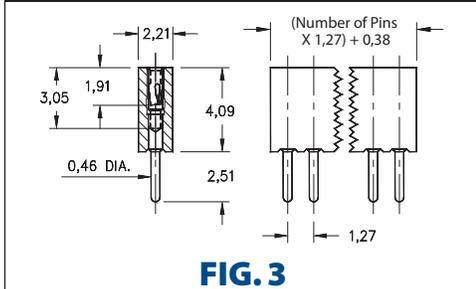
## SERIES 850, 851, 852, 853 • 1,27 GRID HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



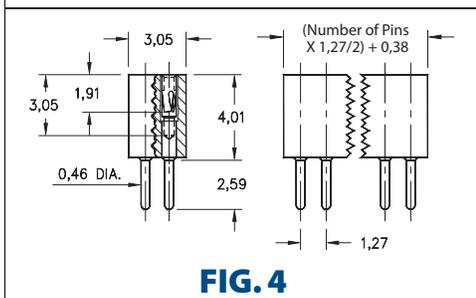
**FIG. 1**



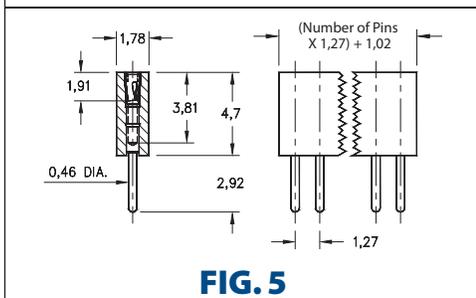
**FIG. 2**



**FIG. 3**

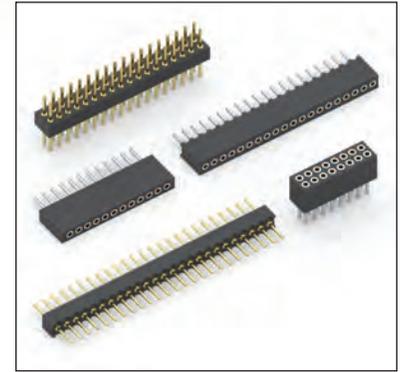


**FIG. 4**



**FIG. 5**

- Series 850, 851, 852, 853 single and double row interconnects have 1,27 pin spacing and permit board stacking as low as 6,3
- Pin headers have 0,41 dia. pins (MM #4006-0) See page 208 for details
- MM #0467 and MM #4890 receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. (#11 contact accepts pin diameters from 0,38 - 0,51). See pages 158 and 160 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

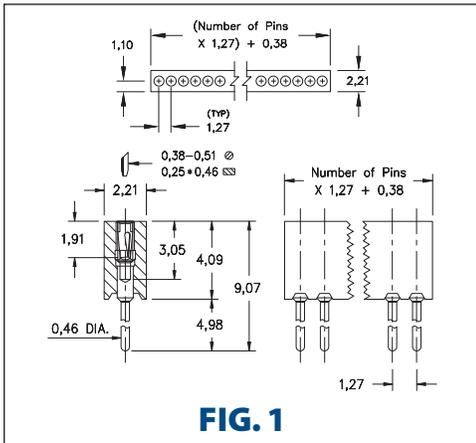


### ORDERING INFORMATION

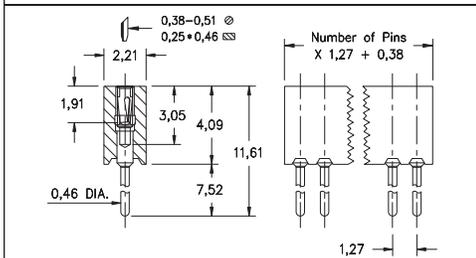
<b>FIG. 1</b>	<b>Series 850...001</b>	<b>Single Row 2,21 Profile Pin Header</b>					
	850-XX-0__-10-001000	Specify number of pins $\uparrow$ 01-50					
<b>FIG. 2</b>	<b>Series 852...001</b>	<b>Double Row 2,11 Profile Pin Header</b>					
	852-XX-__-10-001000	Specify number of pins $\uparrow$ 004-100					
							
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 			
Pin Plating 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn			
<b>FIG. 3</b>	<b>Series 851...001</b>	<b>Single Row 4,09 Profile Socket</b>					
	851-XX-0__-10-001000	Specify number of pins $\uparrow$ 01-50					
<b>FIG. 4</b>	<b>Series 853...001</b>	<b>Double Row 4,09 Profile Socket</b>					
	853-XX-__-10-001000	Specify number of pins $\uparrow$ 004-100					
<b>FIG. 5</b>	<b>Series 851...002</b>	<b>Single Row 4,7 Profile Socket</b>					
	851-XX-0__-10-002000	Specify number of pins $\uparrow$ 01-77					
							
<b>SPECIFY PLATING CODE XX=</b>		91	93	99	41 	43 	47 
Sleeve (Pin) 		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip) 		0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	Au Flash

# INTERCONNECTS

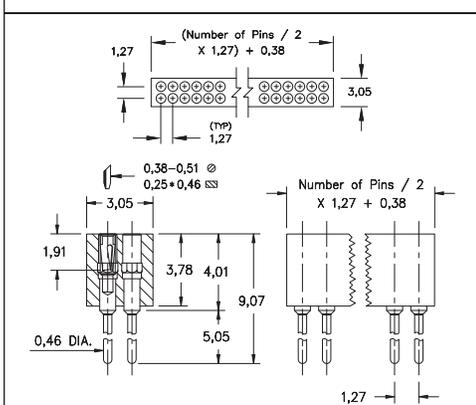
## SERIES 851 & 853 • 1,27 GRID LONG TAIL SOCKETS • SINGLE AND DOUBLE ROW STRIPS



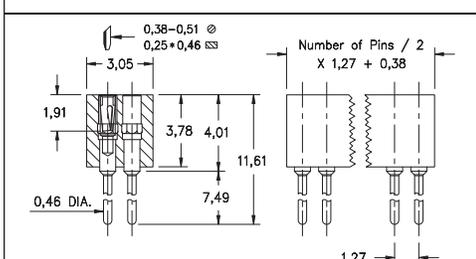
**FIG. 1**



**FIG. 2**

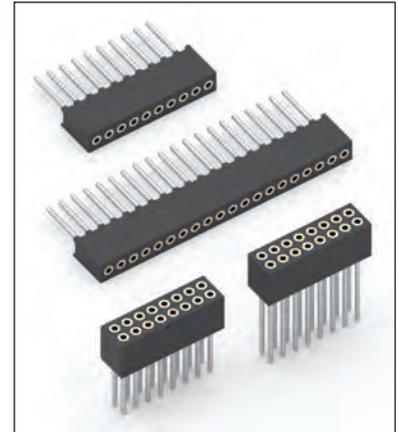


**FIG. 3**



**FIG. 4**

- Series 851...011 and 853...011 use MM #4890-1 pins. See page 160 for details
- Series 851...021 and 853...021 use MM #4890-2 pins. See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. (#11 contact accepts pin diameters from 0,38 - 0,51 ). See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



## ORDERING INFORMATION

	Series 851...011	Single Row Socket
<b>FIG. 1</b>	851-XX-0	-10-011000 Specify number of pins 01-50
<b>FIG. 2</b>	Series 851...021	Single Row Socket
<b>FIG. 3</b>	Series 853...011	Double Row Socket
<b>FIG. 4</b>	Series 853...021	Double Row Socket

<b>SPECIFY PLATING CODE XX=</b>		
Sleeve (Pin)		41  43
Contact (Clip)		5,08µm Sn 5,08µm Sn 0,25µm Au 0,76µm Au

# INTERCONNECTS

## SERIES 850 & 851 • 1,27 GRID SOLDER CUP HEADERS AND SOCKETS • SINGLE ROW STRIPS

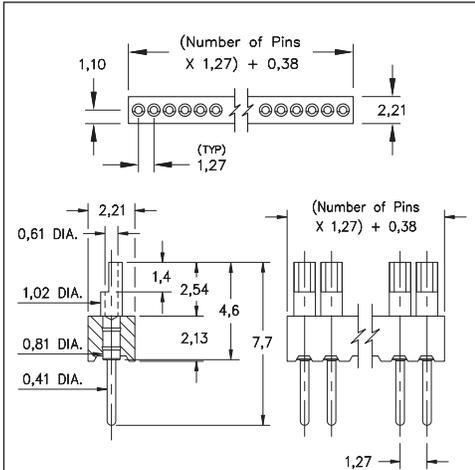


FIG. 1

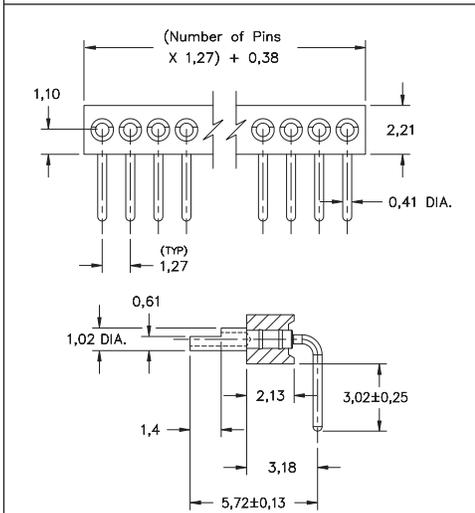


FIG. 2

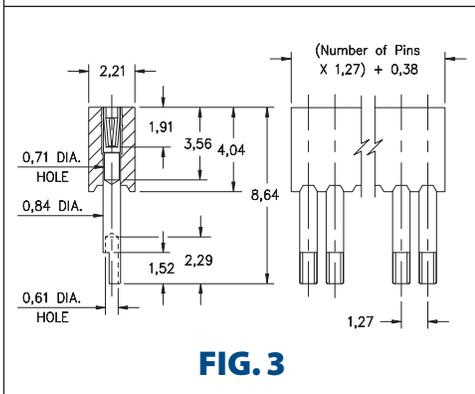
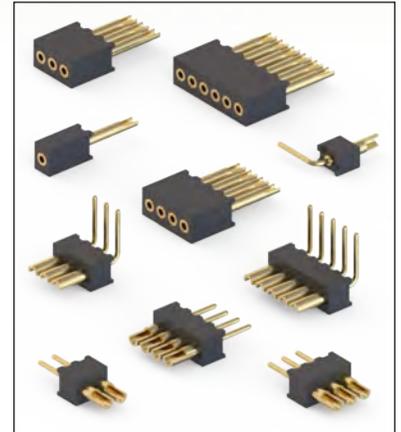


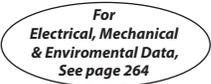
FIG. 3

- Solder cups are pre-aligned and accept up to 26 AWG wire
- Series 850 headers use MM #3050-0 pins. See page 244 for details
- Series 851 sockets use MM #1157-0 receptacles that accept pin diameters from 0,38 - 0,51 See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

FIG. 1	Series 850...003	Single Row Solder Cup / Solder Tail	850-XX-0-10-003000
	Specify number of pins		01-50
FIG. 2	Series 850...003	Single Row Right Angle Solder Cup	850-XX-0-20-003000
	Specify number of pins		01-50
  			
SPECIFY PLATING CODE XX=		10	
Pin Plating		 0,25µm Au	

FIG. 3	Series 851...003	Single Row Solder Cup Socket	851-XX-10-003000
	Specify number of pins		01-50
  			
SPECIFY PLATING CODE XX=		13	
Sleeve (Pin)		 0,25µm Au	
Contact (Clip)		 0,76µm Au	

# INTERCONNECTS

## SERIES 852 & 853 • 1,27 GRID SOLDER CUP HEADERS AND SOCKETS, DOUBLE ROW STRIPS

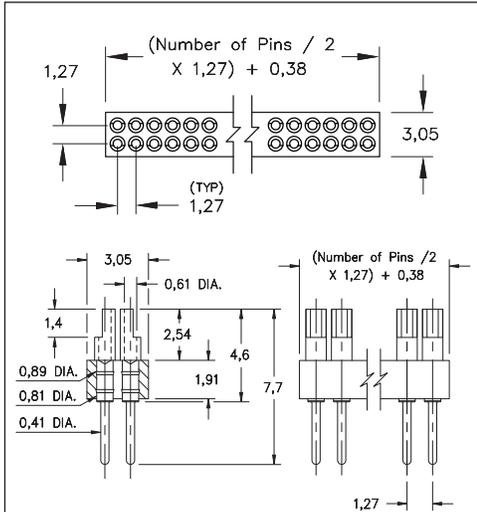


FIG. 1

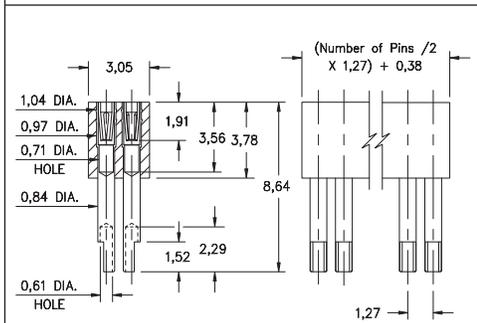
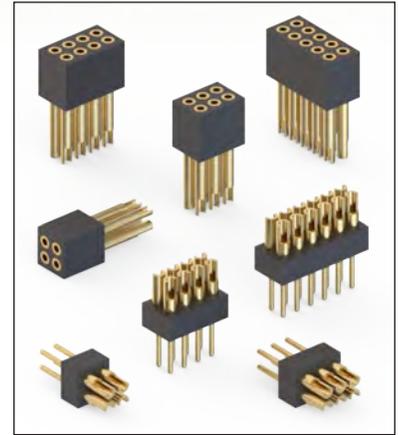


FIG. 2

- Solder cups are pre-aligned and accept up to 26 AWG wire
- Series 852 headers use MM #3050-0 pins. See page 244 for details
- Series 853 sockets use MM #1157-0 receptacles that accept pin diameters from 0,38 - 0,51. See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 852...003</b>	<b>Double Row Solder Cup / Solder Tail</b>			
		852-XX-__-10-003000			
		Specify number of pins	↑	002-100	
		XX=Plating Code See Below	For Electrical, Mechanical & Environmental Data, See page 264		
	<b>SPECIFY PLATING CODE XX=</b>	10			
	Pin Plating	0,25µm Au			

<b>FIG. 2</b>	<b>Series 853...003</b>	<b>Double Row Solder Cup Sockets</b>			
		853-XX-__-10-003000			
		Specify number of pins	↑	002-100	
		XX=Plating Code See Below	For Electrical, Mechanical & Environmental Data, See page 264		
	<b>SPECIFY PLATING CODE XX=</b>	13			
	Sleeve (Pin)	0,25µm Au			
	Contact (Clip)	0,76µm Au			



# INTERCONNECTS

## SERIES 850, 851, 852, 853 • 1,27 GRID RIGHT ANGLE HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

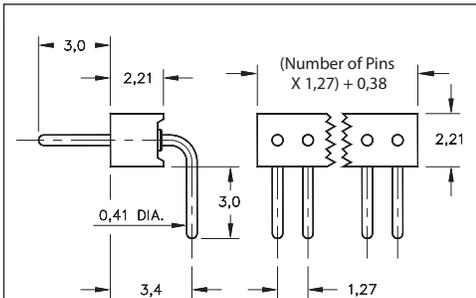


FIG. 1

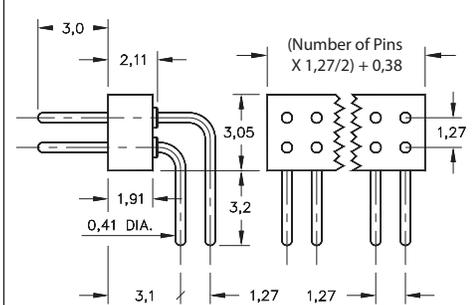


FIG. 2

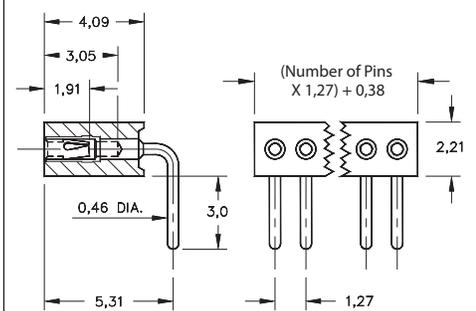


FIG. 3

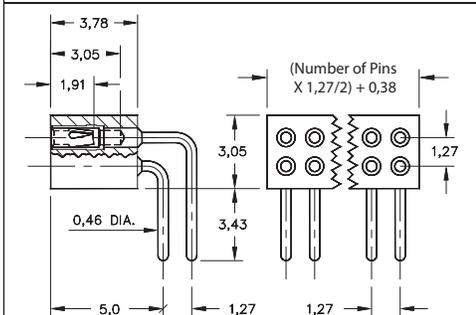


FIG. 4

- Series 850 and 851 interconnects are available in single and double row form
- Series 850 & 852 headers use MM #4006-1 and #4006-2 pins. See page 208 for details
- Series 851 & 853 sockets use MM #4890-1 and #4890-2 receptacles that accept pin diameters from 0,38 - 0,53. See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



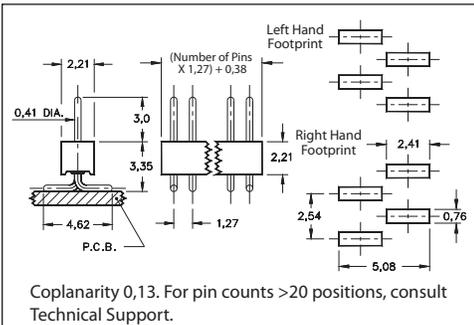
### ORDERING INFORMATION

FIG. 1	<b>Series 850...001</b>	<b>Single Row Right Angle Pin Header</b>		
	850-XX-0- -20-001000	Specify number of pins $\uparrow$ 01-50		
FIG. 2	<b>Series 852...001</b>	<b>Double Row Right Angle Pin Header</b>		
	852-XX- -20-001000	Specify number of pins $\uparrow$ 002-100		
  				
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 
Pin Plating 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

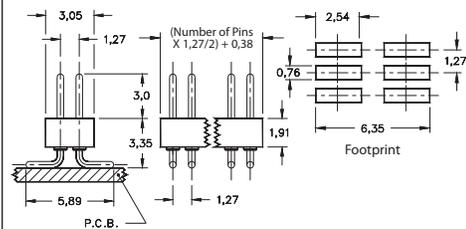
FIG. 3	<b>Series 851...001</b>	<b>Single Row Right Angle Socket</b>				
	851-XX-0- -20-001000	Specify number of pins $\uparrow$ 01-50				
FIG. 4	<b>Series 853...001</b>	<b>Double Row Right Angle Socket</b>				
	853-XX- -20-001000	Specify number of pins $\uparrow$ 002-100				
  						
<b>SPECIFY PLATING CODE XX=</b>			93	99	43 	47 
Sleeve (Pin) 			5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip) 			0,76µm Au	2,54µm Sn/Pb	0,76µm Au	Au Flash

# INTERCONNECTS

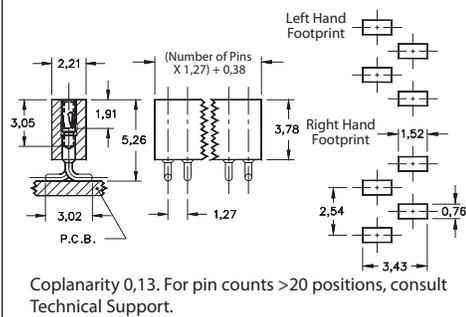
## SERIES 850, 851, 852, 853 • 1,27 GRID SURFACE MOUNT HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



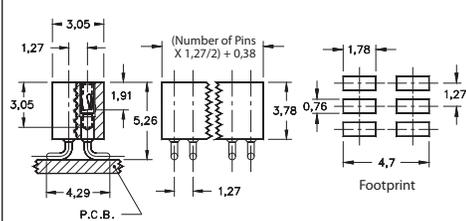
**FIG. 1**



**FIG. 2**

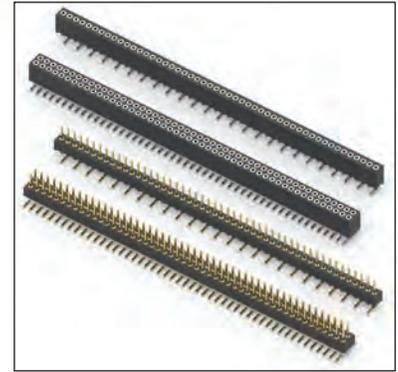


**FIG. 3**



**FIG. 4**

- Single row interconnects having an even number of pins are now available with a left or right hand footprints
- Headers (850 and 852) use MM #4006 pins. See page 208 for details
- Sockets (851 and 853) use MM #4890-0 receptacles and accept pin diameters from 0,38 - 0,51. See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



## ORDERING INFORMATION

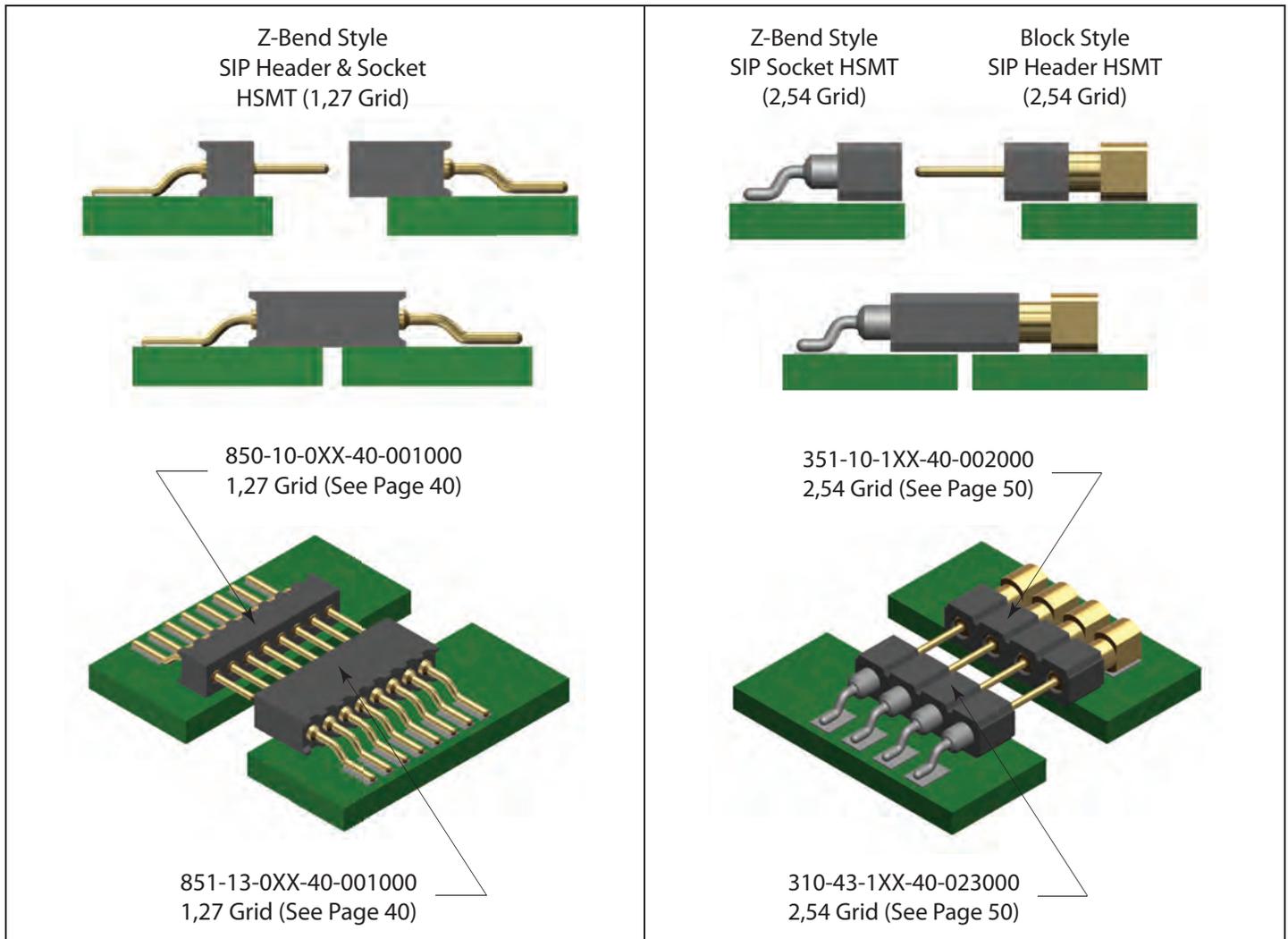
<b>FIG. 1L</b>	<b>Single Row Header, Left Hand Footprint, Odd or Even # of Pins</b>						
	850-XX-0__-30-001000 Specify number of pins ↑ 02-50						
<b>FIG. 1R</b>	<b>Single Row Header, Right Hand Footprint, Even # of Pins</b>						
	850-XX-0__-30-002000 Specify number of pins ↑ 02-50						
<b>FIG. 2</b>	<b>Double Row Header, Even # of Pins</b>						
	852-XX-__-30-001000 Specify number of pins ↑ 004-100						
<b>SPECIFY PLATING CODE XX=</b>		10 ◆	90	40 ◆			
<b>Pin Plating</b>		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn			
<b>FIG. 3L</b>	<b>Single Row Socket, Left Hand Footprint, Odd or Even # of Pins</b>						
	851-XX-0__-30-001000 Specify number of pins ↑ 02-50						
<b>FIG. 3R</b>	<b>Single Row Socket, Right Hand Footprint, Even # of Pins</b>						
	851-XX-0__-30-002000 Specify number of pins ↑ 02-50						
<b>FIG. 4</b>	<b>Double Row Socket, Even # of Pins</b>						
	853-XX-__-30-001000 Specify number of pins ↑ 004-100						
		<b>XX=Plating Code See Below</b>		<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>			
<b>SPECIFY PLATING CODE XX=</b>		91	93	99	41 ◆	43 ◆	44 ◆
<b>Sleeve (Pin)</b>		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
<b>Contact (Clip)</b>		0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn

★ 44 Plating Non-Standard



# HORIZONTAL SMT PINS & CONNECTORS

VERSATILE CONNECTORS FOR HORIZONTAL & EDGE BOARD MATING APPLICATIONS



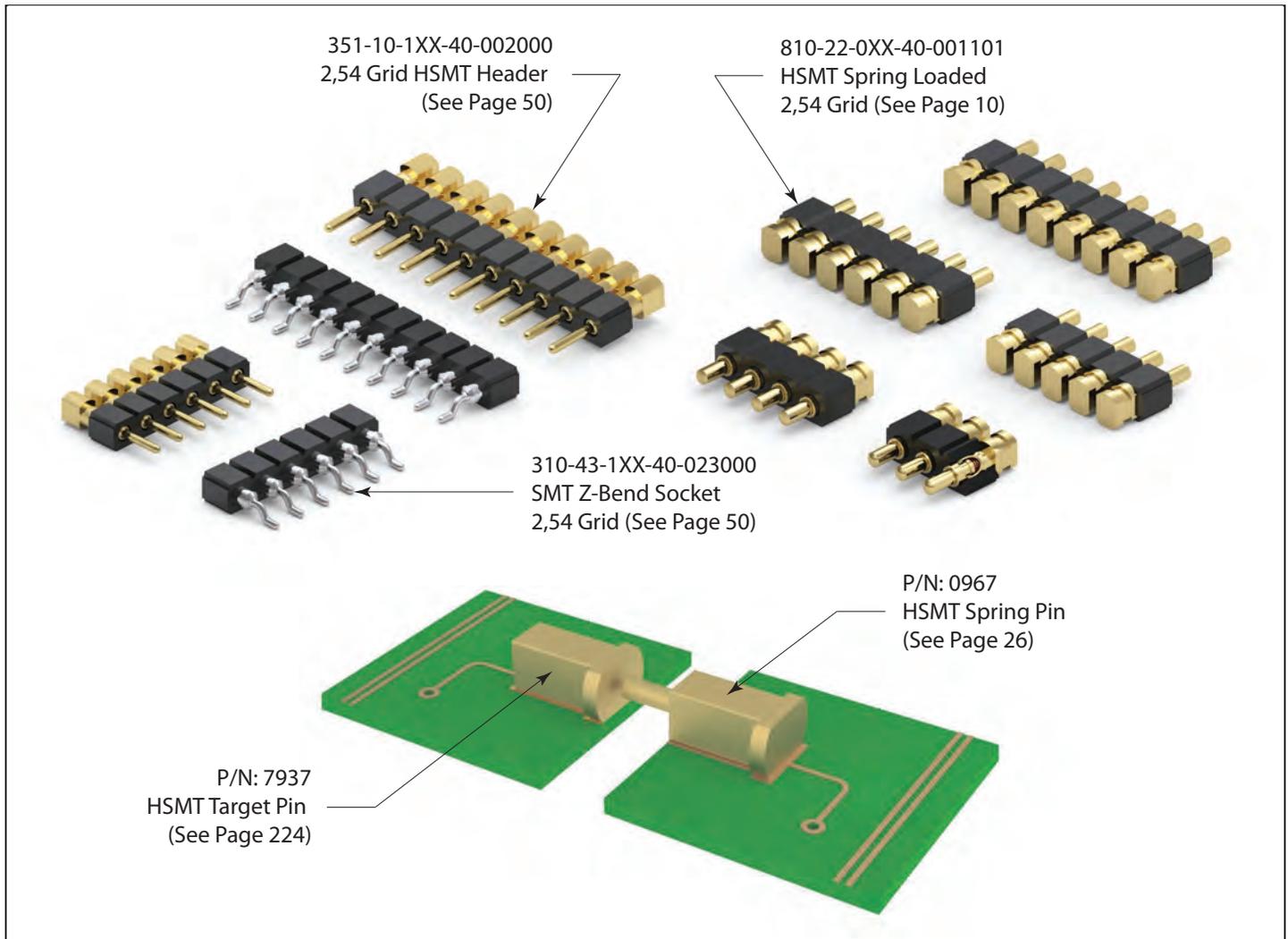
Mill-Max Mfg. offers a complete line of Horizontal Surface Mount products including headers and sockets on 1,27mm and 2,54mm grid, discrete spring-loaded and mating target pins and spring-loaded connector strips.

For low profile IO applications surface mount SIP sockets and headers strips are assembled parallel to the board surface. They are ideal for placement near the board edge for easy access test connections & creating pluggable adapter modules which can sit perpendicular to the motherboard (mated to a vertical connector), effectively conserving precious board real estate.



# HORIZONTAL SMT PINS & CONNECTORS

VERSATILE CONNECTORS FOR HORIZONTAL & EDGE BOARD MATING APPLICATIONS

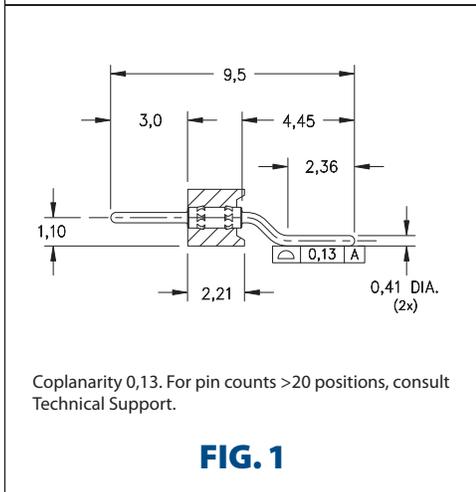
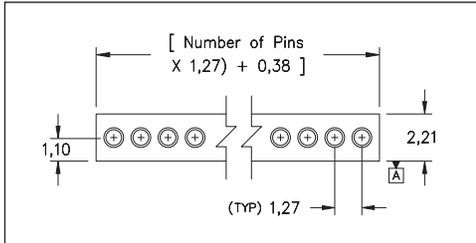


Mill-Max Mfg's #0967 (featured above) is a low profile, horizontal, surface mount spring pin designed for edge board interface applications: board-to-board or device-to-board. The #0967 mounts parallel to the P.C. board so that the plunger travel is horizontal to the board surface. The above board height of 2,54mm provides a low profile for tight packaging requirements. Typically mounted on the edge of the P.C. board, it can be mated with a board running perpendicular to it, or parallel P.C. boards can be daisy-chained together by using the Mill-Max Mfg. #7937 horizontal SMT target pin and #0967 on opposing boards.

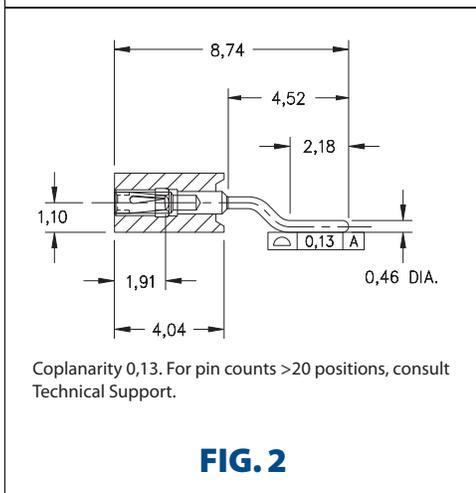
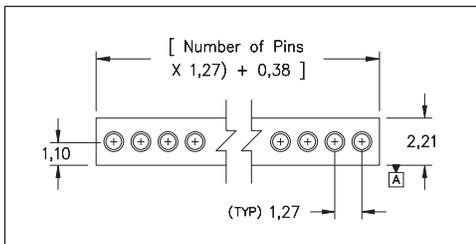


# INTERCONNECTS

## SERIES 850 & 851 • 1,27 GRID HORIZONTAL SURFACE MOUNT Z-BEND HEADERS & SOCKETS • SINGLE ROW STRIPS

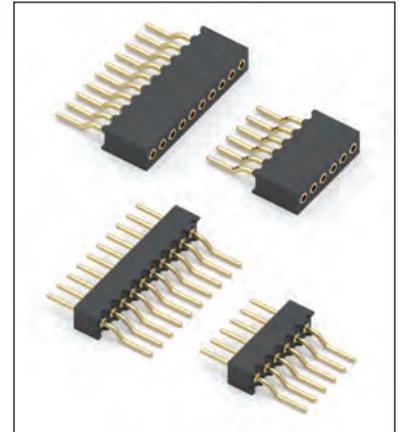


**FIG. 1**

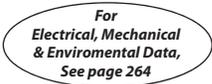


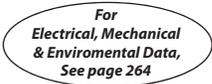
**FIG. 2**

- Series 850 horizontal surface mount headers have 0,41 dia. pluggable pins and Z-bend tails for SMT soldering to the P.C.B. (MM #4006-1). See page 208 for details
- Series 851 horizontal Surface Mount Z-Bend sockets uses MM #4890-1 receptacles that accept pin diameters from 0,38 - 0,51. See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



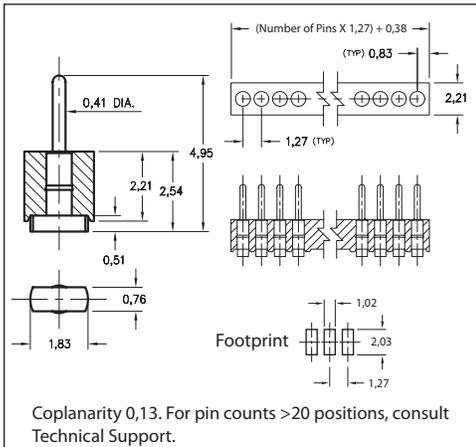
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 850...001 Single Row Surface Mount Z-Bend Header</b>					
	850-10-0-40-001000					
	Specify number of pins		02-20			
  						
<b>SPECIFY PLATING CODE XX=</b>		10				
Pin Plating			0,25µm Au			

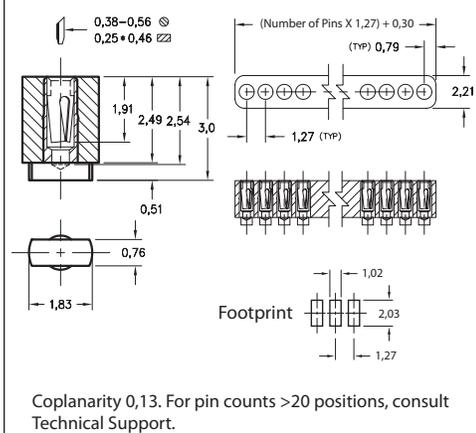
<b>FIG. 2</b>	<b>Series 851...001 Single Row Surface Mount Z-Bend Socket</b>					
	851-XX-0-40-001000					
	Specify number of pins		02-20			
  						
<b>SPECIFY PLATING CODE XX=</b>		11	13			
Sleeve (Pin)			0,25µm Au	0,25µm Au		
Contact (Clip)			0,25µm Au	0,76µm Au		

# INTERCONNECTS

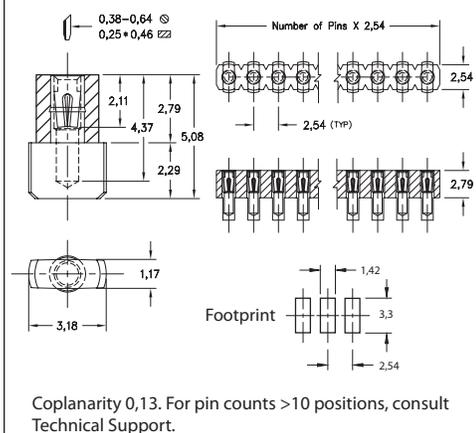
## SERIES 340 & 399 • 1,27 AND 2,54 GRID SURFACE MOUNT HEADERS & SOCKETS • SINGLE ROW STRIPS



**FIG. 1**

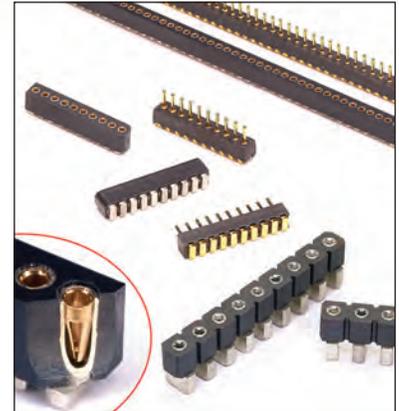


**FIG. 2**



**FIG. 3**

- Series 340 and 399 interconnects are single row headers & sockets having unique surface mount "block" terminals
- "Block" termination makes the interconnects "self standing". This also minimizes profile and reduces the footprint compared with traditional "gullwing" designs
- Series 399 is a matched pair of 1,27 pitch sockets and headers with a mated height of only 5,54
- Series 340 is a 2,54 pitch SIP socket using a Hi-Rel, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering processes

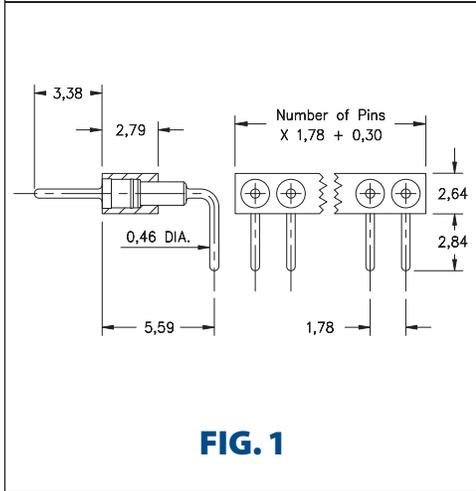
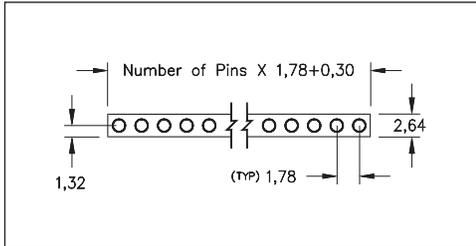


### ORDERING INFORMATION

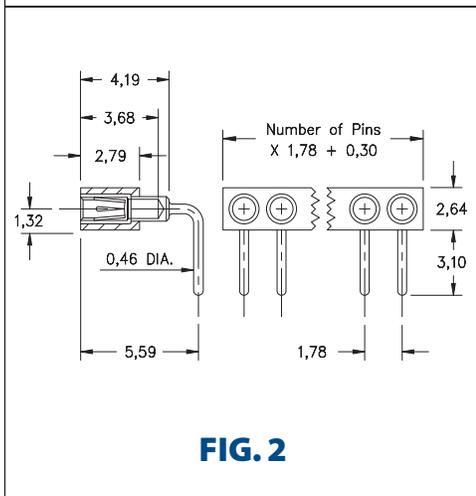
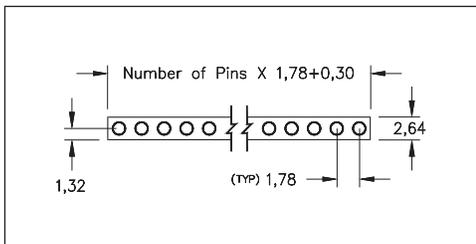
<b>FIG. 1</b>	<b>Series 399...310</b>	<b>Single Row 1,27 Grid Header</b>			
		399-10-0-00-310000			
	Specify number of pins	↑		02-50	
		XX=Plating Code See Below		For Electrical, Mechanical & Environmental Data, See page 264	
	<b>SPECIFY PLATING CODE XX=</b>	10			
	Pin Plating	0,25µm Au			
<b>FIG. 2</b>	<b>Series 399...300</b>	<b>Single Row 1,27 Grid Socket</b>			
		399-XX-0-21-300000			
	Specify number of pins	↑		02-50	
		XX=Plating Code See Below		For Electrical, Mechanical & Environmental Data, See page 264	
	<b>SPECIFY PLATING CODE XX=</b>		91	41	
	Sleeve (Pin)		5,08µm Sn/Pb		5,08µm Sn
	Contact (Clip)		0,25µm Au		0,25µm Au
<b>FIG. 3</b>	<b>Series 340...780</b>	<b>Single Row 2,54 Grid Socket</b>			
		340-XX-1-30-780100			
	Specify number of pins	↑		02-64	
		XX=Plating Code See Below		For Electrical, Mechanical & Environmental Data, See page 264	
	<b>SPECIFY PLATING CODE XX=</b>			99	44
	Sleeve (Pin)			5,08µm Sn/Pb	5,08µm Sn
	Contact (Clip)			2,54µm Sn/Pb	2,54µm Sn

# INTERCONNECTS

## SERIES 870 & 871 • 1,78 GRID (0,46 DIA.) PINS, RIGHT ANGLE HEADERS & SOCKETS • SINGLE ROW STRIPS

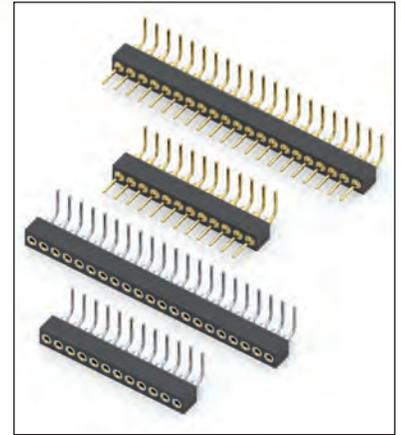


**FIG. 1**



**FIG. 2**

- Series 870 and 871 Interconnects feature space saving 1,78 pitch
- Series 870 uses MM #3790-0 pins. See page 209 for details
- Series 871 uses MM #1805 receptacles and accept pin diameters from 0,38 - 0,64. See page 169 for details
- Receptacles use Hi-Rel, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 870...20-001</b>	<b>Right Angle Pin Header</b>
	870-10-0-20-001000	
	Specify number of pins	02-21

<b>RoHS - 2</b> 2011/65/EU	<b>XX=Plating Code</b> See Below	For Electrical, Mechanical & Environmental Data, See page 264
<b>SPECIFY PLATING CODE XX=</b>	10	
Pin Plating	0,25µm Au	

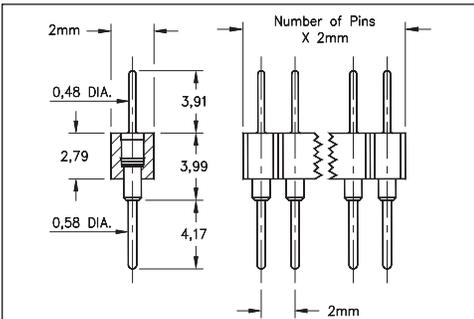
<b>FIG. 2</b>	<b>Series 871...20-001</b>	<b>Right Angle Socket</b>
	871-XX-0-20-001000	
	Specify number of pins	02-21

<b>RoHS - 2</b> 2011/65/EU	<b>XX=Plating Code</b> See Below	For Electrical, Mechanical & Environmental Data, See page 264
<b>SPECIFY PLATING CODE XX=</b>	41	43
Sleeve (Pin)	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,25µm Au	0,76µm Au

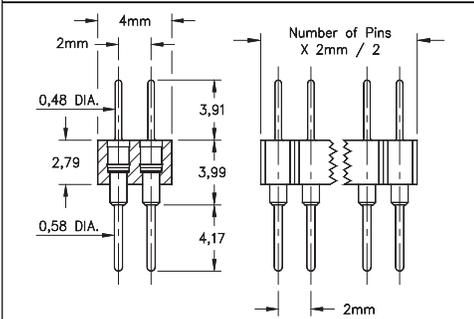


# INTERCONNECTS

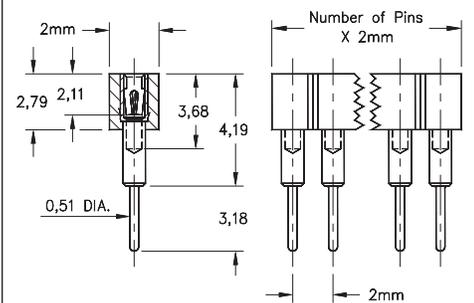
## SERIES 830, 831, 832, 833 • 2mm GRID HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



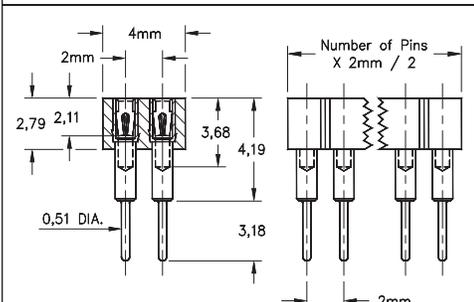
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- Series 830 single & double row interconnects have 2mm pin spacing and permit board stacking as low as 8,18
- Pin headers (830 & 832 series) use MM #5012 pins. See page 208 for details
- Sockets (831 & 833 series) use MM #1802 receptacles and accept pin diameters from 0,38 - 0,64. See page 169 for details
- Contact is rated at 3 amps
- Insulators are high temperature thermoplastic, suitable for all soldering operations

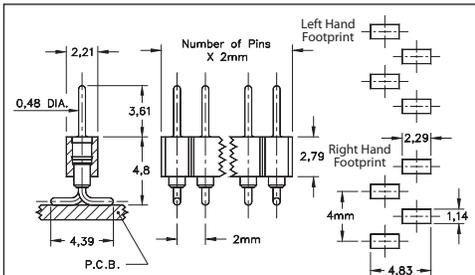


### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 830...001</b>	<b>Single Row Pin Header</b>			
	830-XX-0	-10-001000	Specify number of pins → 01-50		
<b>FIG. 2</b>	<b>Series 832...001</b>	<b>Double Row Pin Header</b>			
	832-XX-	-10-001000	Specify number of pins → 004-100		
					
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 	
Pin Plating 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	
<b>FIG. 3</b>	<b>Series 831...001</b>	<b>Single Row Socket</b>			
	831-XX-0	-10-001000	Specify number of pins → 01-50		
<b>FIG. 4</b>	<b>Series 833...001</b>	<b>Double Row Socket</b>			
	833-XX-	-10-001000	Specify number of pins → 004-100		
					
<b>SPECIFY PLATING CODE XX=</b>			91	93	41  43  47 
Sleeve (Pin) 			5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn 5,08µm Sn 5,08µm Sn
Contact (Clip) 			0,25µm Au	0,76µm Au	0,25µm Au 0,76µm Au Au Flash

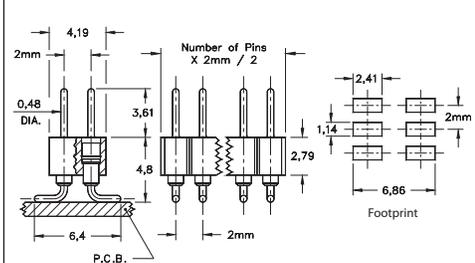
# INTERCONNECTS

## SERIES 830, 831, 832, 833 • 2mm GRID GULL WING SURFACE MOUNT HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



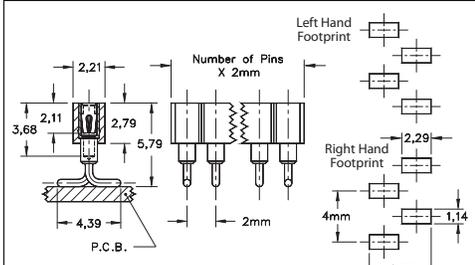
Coplanarity 0,13. For pin counts >12 positions, consult Technical Support.

**FIG. 1**



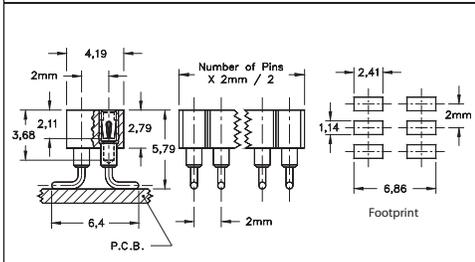
Coplanarity 0,13. For pin counts >24 positions, consult Technical Support.

**FIG. 2**



Coplanarity 0,13. For pin counts >12 positions, consult Technical Support.

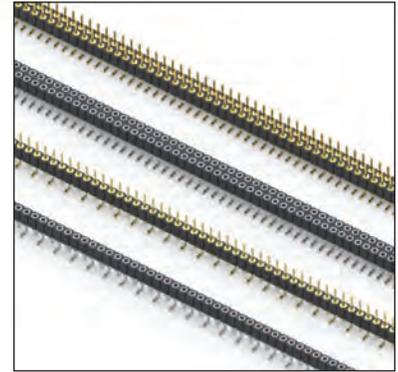
**FIG. 3**



Coplanarity 0,13. For pin counts >24 positions, consult Technical Support.

**FIG. 4**

- Headers (830 & 832) use MM #6218 pins. See page 208 for details
- Sockets (831 & 833) use MM #1802 receptacles and accept pin diameters from 0,38 - 0,64. See page 169 for details
- Coplanarity 0,13 (Single Row max 12 pins; Double Row max 24 pins) For higher pin counts, contact Technical Support
- Contact is rated at 3 amps
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1L</b>	<b>Single Row Header, Left Hand Footprint, Odd or Even # of pins</b>			
	830-XX-0__-30-001000 Specify number of pins <input type="text" value="02-50"/>			
<b>FIG. 1R</b>	<b>Single Row Header, Right Hand Footprint, Even # of pins</b>			
	830-XX-0__-30-002000 Specify number of pins <input type="text" value="02-50"/>			
<b>FIG. 2</b>	<b>Double Row Header, Even # of pins</b>			
	832-XX-__-30-001000 Specify number of pins <input type="text" value="004-100"/>			
<b>SPECIFY PLATING CODE XX=</b>		10	90	40
<b>Pin Plating</b>		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn
<b>FIG. 3L</b>	<b>Single Row Socket, Left Hand Footprint, Odd or Even # of pins</b>			
	831-XX-0__-30-001000 Specify number of pins <input type="text" value="02-50"/>			
<b>FIG. 3R</b>	<b>Single Row Socket, Right Hand Footprint, Even # of pins</b>			
	831-XX-0__-30-002000 Specify number of pins <input type="text" value="02-50"/>			
<b>FIG. 4</b>	<b>Double Row Socket, Even # of pins</b>			
	833-XX-__-30-001000 Specify number of pins <input type="text" value="004-100"/>			
		<b>XX=Plating Code See Below</b>		<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>
<b>SPECIFY PLATING CODE XX=</b>		91	93	41  43
<b>Sleeve (Pin)</b>		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn 5,08µm Sn
<b>Contact (Clip)</b>		0,25µm Au	0,76µm Au	0,25µm Au 0,76µm Au

# INTERCONNECTS

## SERIES 830 AND 832 • 2mm GRID SOLDER CUP HEADERS, SINGLE ROW RIGHT ANGLE, SINGLE AND DOUBLE ROW STRAIGHT

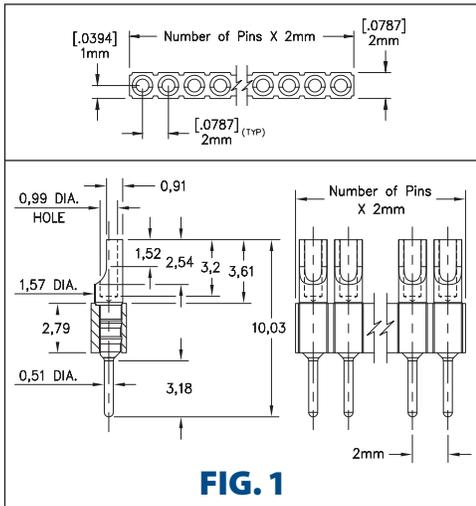


FIG. 1

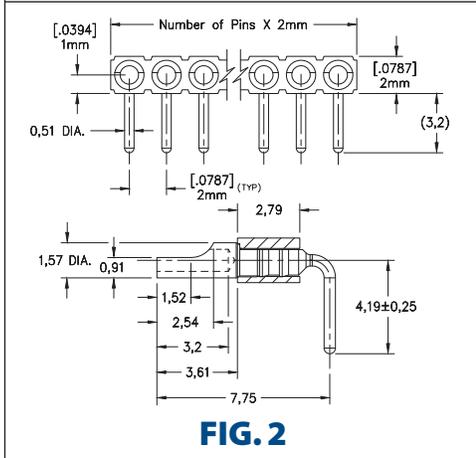


FIG. 2

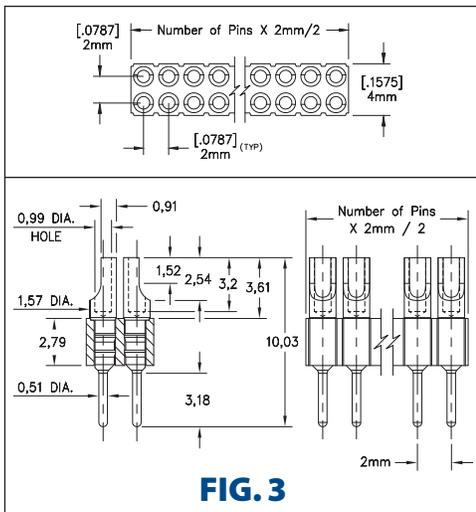
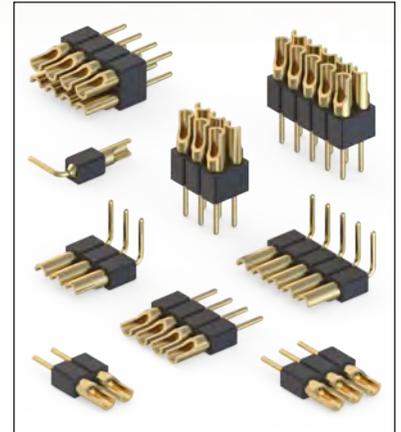


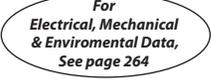
FIG. 3

- Series 830 & 832 solder cup headers for 2mm pitch wire termination applications
- 0,51 diameter pins are suitable for mating with standard sockets or for through-hole soldering to the P.C.B.
- Connectors feature uniformly aligned solder cups & anti-rotation construction to facilitate efficient soldering
- Accepts up to 22 AWG Stranded wire
- Series 830 right angle headers are low profile and minimize wire manipulation for parallel mating conditions
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

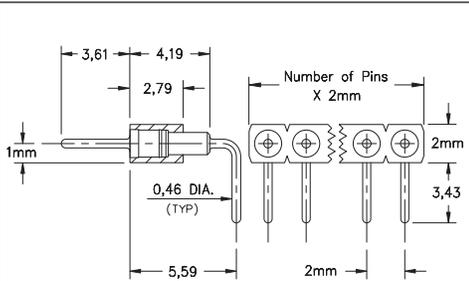
FIG. 1	<b>Series 830...005</b>	<b>Single Row Solder Cup Header</b>
	830-10-0-__-10-005000	Specify number of pins → 01-50
FIG. 2	<b>Series 830...005</b>	<b>Solder Cup Header Right Angle</b>
	830-10-0-__-20-005000	Specify number of pins → 01-50
  		
SPECIFY PLATING CODE XX= 10 		
Pin Plating  0,25µm Au		

FIG. 3	<b>Series 832...005</b>	<b>Double Row Solder Cup Header</b>
	832-10-__-__-10-005000	Specify number of pins → 004-100
  		
SPECIFY PLATING CODE XX= 10 		
Pin Plating  0,25µm Au		

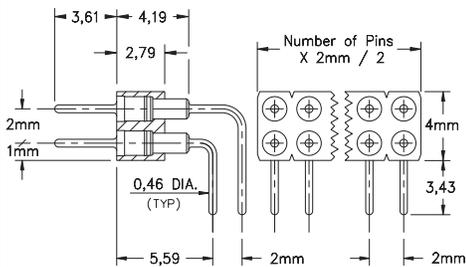


# INTERCONNECTS

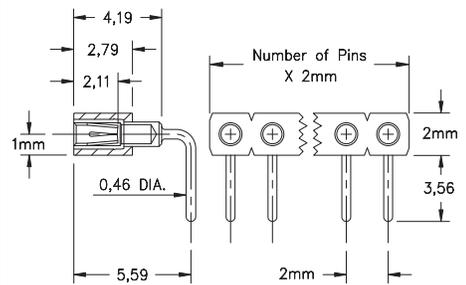
## SERIES 830, 831, 832, 833 • 2mm GRID RIGHT ANGLE HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



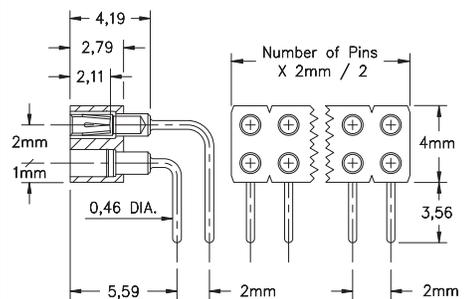
**FIG. 1**



**FIG. 2**

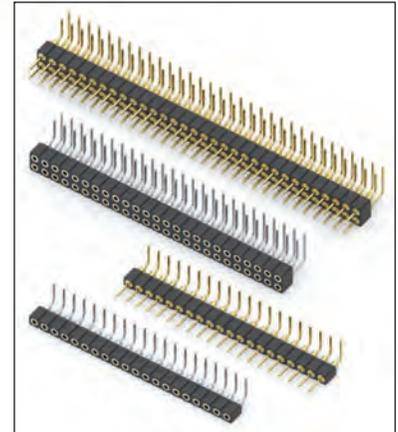


**FIG. 3**

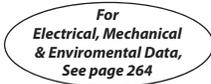


**FIG. 4**

- Series 830 & 832 use MM #3790 & MM #3796 pins. See page 209 for details
- Series 831 & 833 use MM #1805 and MM #3805 receptacles and accept pin diameters from 0,38 - 0,64. See page 169 for details
- Receptacles use Hi-Rel, Low force, 6-finger BeCu #32 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 830...001</b>	<b>Single Row Right Angle Header</b>				
	830-10-0	-20-001000	Specify number of pins	01-50		
<b>FIG. 2</b>	<b>Series 832...001</b>	<b>Double Row Right Angle Header</b>				
	832-10-	-20-001000	Specify number of pins	002-100		
  						
<b>SPECIFY PLATING CODE XX=</b>			10	◆		
Pin Plating 			0,25µm Au			
<b>FIG. 3</b>	<b>Series 831...001</b>	<b>Single Row Right Angle Socket</b>				
	831-XX-0	-20-001000	Specify number of pins	01-50		
<b>FIG. 4</b>	<b>Series 833...001</b>	<b>Double Row Right Angle Socket</b>				
	833-43-	-20-001000	Specify number of pins	002-100		
  						
<b>SPECIFY PLATING CODE XX=</b>				41	◆	43
Sleeve (Pin) 				5,08µm Sn		5,08µm Sn
Contact (Clip) 				0,25µm Au		0,76µm Au

# INTERCONNECTS

## SERIES 832 & 833 • 2mm GRID (0,51 DIA. PINS), SHROUDED STRAIGHT, SURFACE MOUNT & RIGHT ANGLE • DOUBLE ROW STRIPS

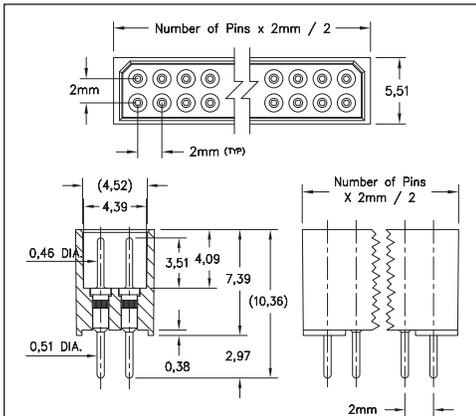


FIG. 1

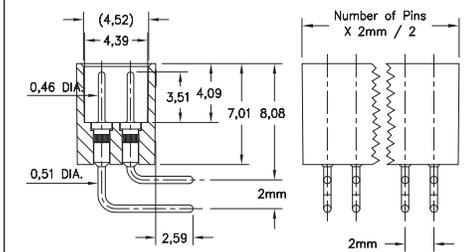


FIG. 2

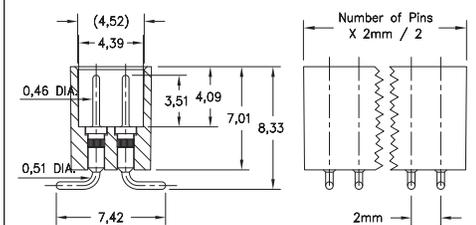


FIG. 3

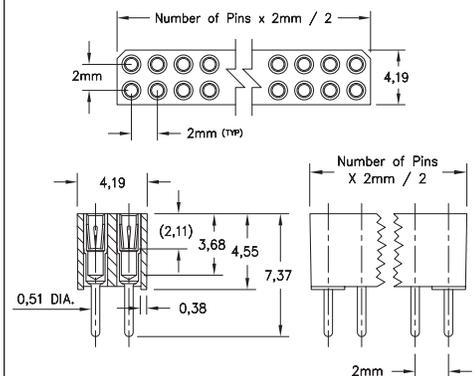
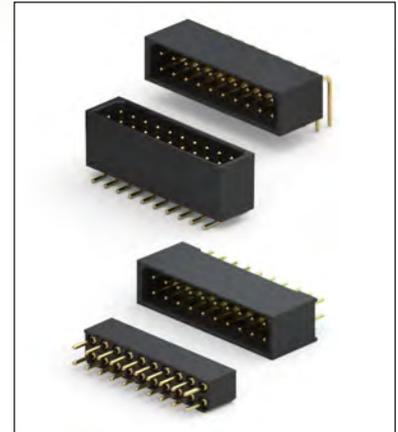


FIG. 4

- Shrouded pin interconnects available with straight Series 832...10-052 or surface mount 832...30-052 and use MM #3143 pins. Series 832...20-052 right angle interconnects use MM #3160 and #3161 pins. See page 214 for details
- Series 833...10-002 with keying features use MM #1802 and accept pin diameters from 0,38 - 0,64. See page 169 for details
- Receptacles use Hi-Rel, Low force, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



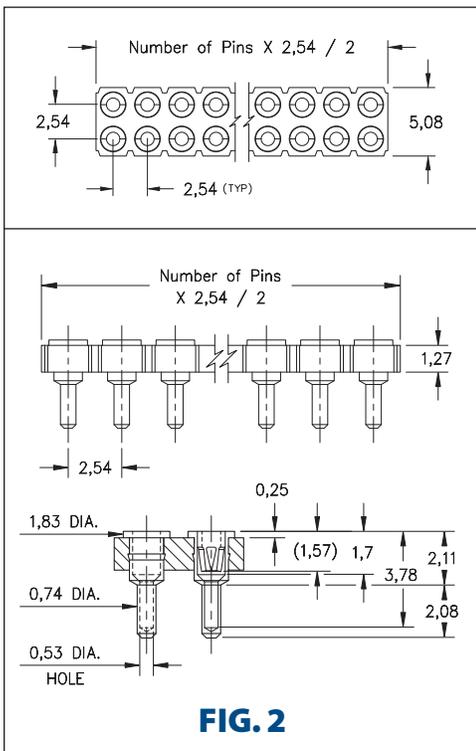
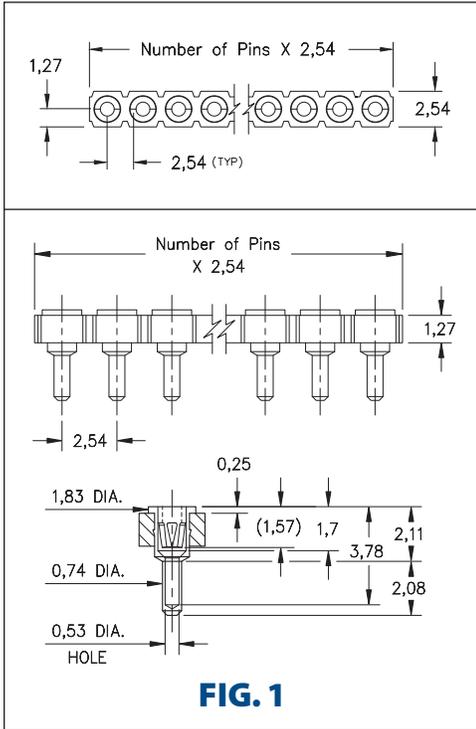
### ORDERING INFORMATION

FIG. 1	Series 832...10-052 Straight Pin Header	
	832-10-__-10-052000	Specify number of pins
FIG. 2	Series 832...20-052 Right Angle Pin Header	
	832-10-__-20-052000	Specify number of pins
FIG. 3	Series 832...30-052 Surface Mount Pin Header	
	832-10-__-30-052000	Specify number of pins
  		
SPECIFY PLATING CODE XX= 10 		
Pin Plating  0,25µm Au		

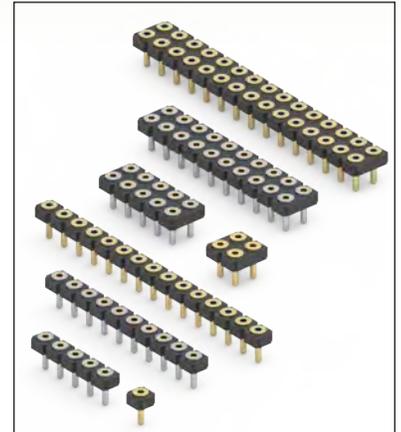
FIG. 4	Series 833...10-002 Double Row Keying Socket	
	833-13-__-10-002000	Specify number of pins
  		
SPECIFY PLATING CODE XX= 13 		
Sleeve (Pin)  0,25µm Au		
Contact (Clip)  0,76µm Au		

# INTERCONNECTS

## SERIES 315 & 415 • 2,54 GRID, SUPER LOW PROFILE SOCKETS • SINGLE AND DOUBLE ROW STRIPS



- Series 315 and 415 solder mount sockets use MM #0512 receptacles that accept pin diameters from 0,38-0,56 . See pages 161 for details
- Hi-Rel, 4-finger BeCu #12 contact is rated at 3 amps. See page 252 for details
- 2,11 Super low profile above the board utilizes 1,27 thick insulators
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 315...004	Single Row Socket
<b>FIG. 1</b>	315-XX-1	-41-004000
	Specify number of pins	01-32
	Series 415...004	Double Row Socket
<b>FIG. 2</b>	415-XX-2	-41-004000
	Specify number of pins	04-72



XX=Plating Code  
See Below

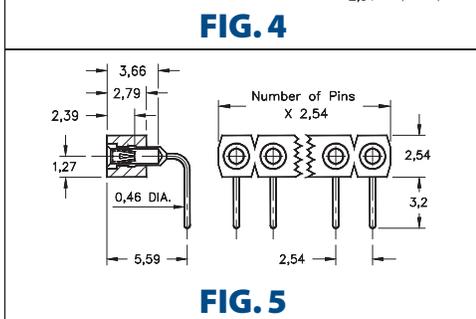
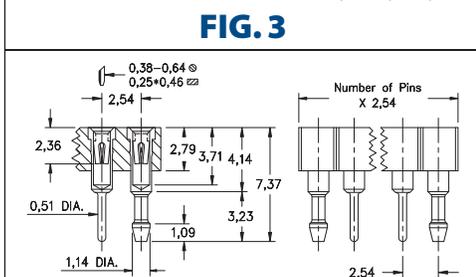
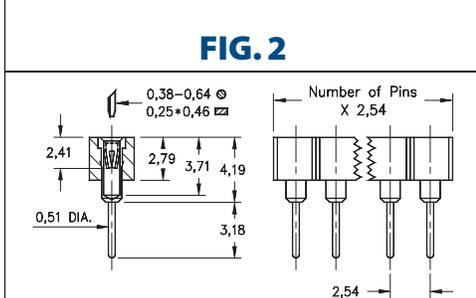
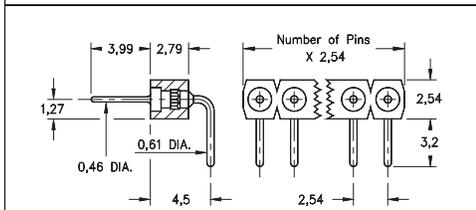
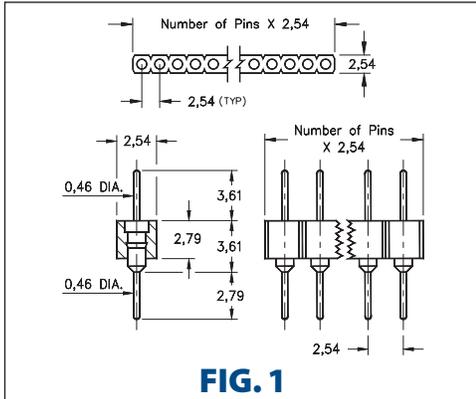
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	13	93	43	44	47
Sleeve (Pin)	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,76µm Au	0,76µm Au	0,76µm Au	2,54µm Sn	Au Flash

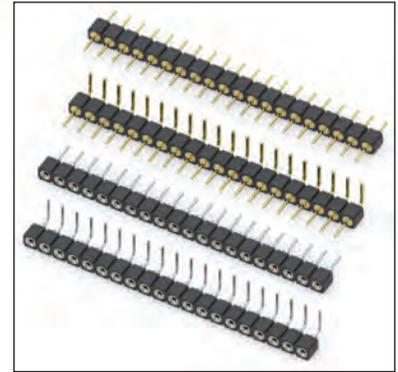


# INTERCONNECTS

## SERIES 301, 310, 350, 399 • 2,54 GRID (0,46 DIA.) PINS, STRAIGHT AND RIGHT ANGLE • SINGLE ROW STRIPS



- Series 3XX are available with straight and right angle solder tails
- Series 350 & 399...009 use MM #3404 and #5011 pins. See pages 212 & 214 for details
- Series 301, 310 & 399...003 use MM #0156, #1001 & #1103 receptacles. See pages 165 and 166 for details
- Receptacles use Hi-Rel, 4-finger #30 BeCu contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

FIG. 1	Series 350...006	Straight Pin Header								
	350-XX-1	-00-006000								
	Specify number of pins	01-64								
FIG. 2	Series 399...009	Right Angle Pin Header								
	399-XX-1	-10-009000								
	Specify number of pins	02-64								
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #d4edda;">RoHS - 2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>										
SPECIFY PLATING CODE XX=		10	90	40						
Pin Plating		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn						
FIG. 3	Series 310...001	Solder Tail Socket								
	310-XX-1	-41-001000								
	Specify number of pins	01-64								
FIG. 4	Series 301...056	Socket with Retention Pins								
	301-43-1	-41-560000								
	Specify number of pins	03-64								
FIG. 5	Series 399...003	Right Angle Socket								
	399-XX-1	-10-003000								
	Specify number of pins	02-64								
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #d4edda;">RoHS - 2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>										
SPECIFY PLATING CODE XX=		11	13	91	93	99	41	43	44	47
Sleeve (Pin)		0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn	Au Flash

★ 41, 91 & 99 Platings Non-Standard



# INTERCONNECTS

## SERIES 410, 450, 499 • 2,54 GRID (0,46 DIA.) PINS, STRAIGHT AND RIGHT ANGLE • DOUBLE ROW STRIPS

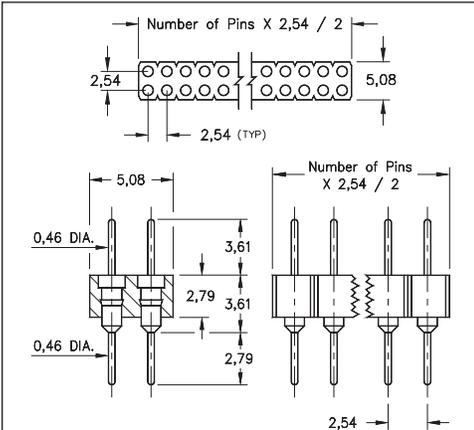


FIG. 1

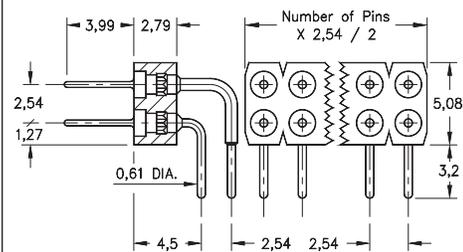


FIG. 2

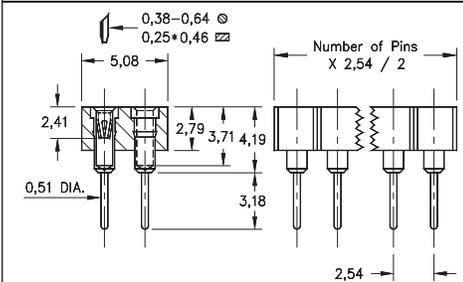


FIG. 3

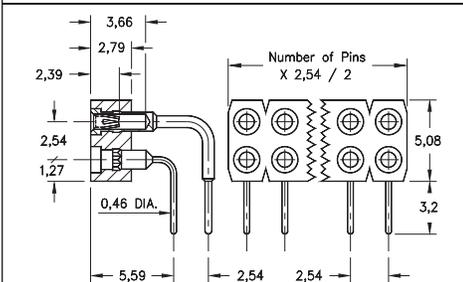
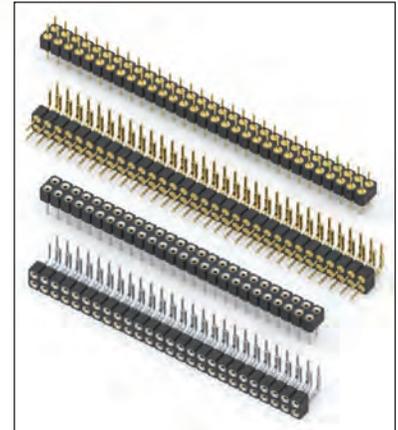


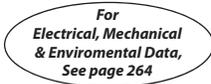
FIG. 4

- Series 4XX are available with straight and right angle solder tails
- Series 450 & 499...009 use MM #3404 and #5011/5113 pins. See pages 212 and 214 for details
- Series 410 & 499...003 use MM #1001 and #1103/1602 receptacles. See pages 165, 166 and 167 for details
- Receptacles use Hi-Rel, 4-finger #30 BeCu contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



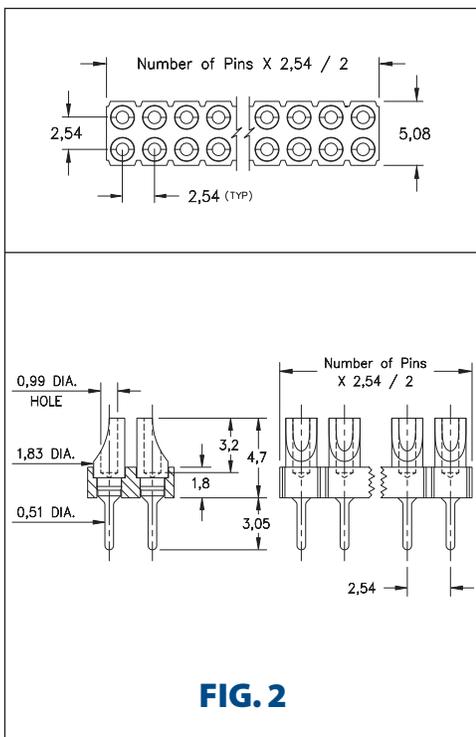
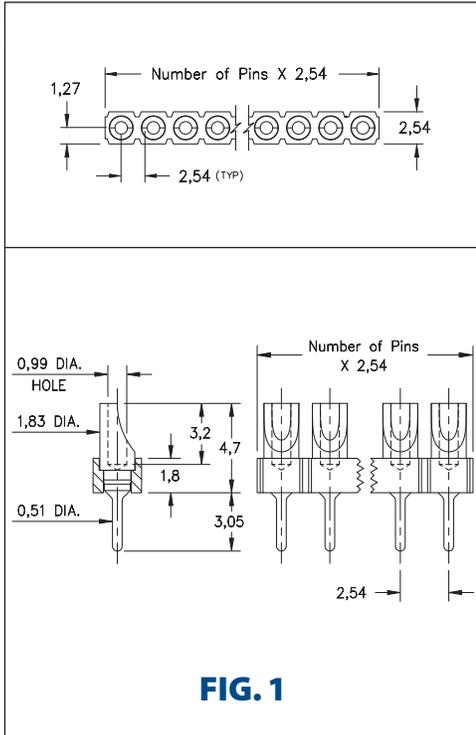
## ORDERING INFORMATION

FIG. 1	Series 450...006	Straight Pin Header		
	450-XX-2	-00-006000		
	Specify number of pins	04-64		
FIG. 2	Series 499...009	Right Angle Pin Header		
	499-10-2	-10-009000		
	Specify number of pins	02-64		
  				
SPECIFY PLATING CODE XX=		10 	90	40 
Pin Plating		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

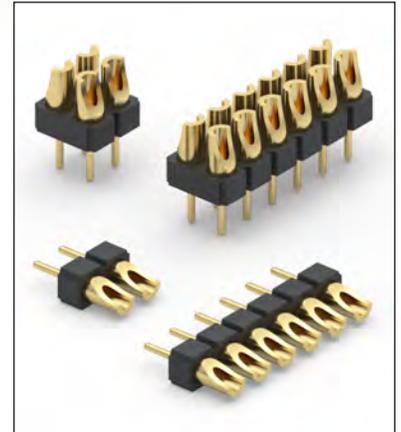
FIG. 3	Series 410...001	Solder Tail Socket					
	410-XX-2	-41-001000					
	Specify number of pins	04-64					
FIG. 4	Series 499...003	Right Angle Socket					
	499-XX-2	-10-003000					
	Specify number of pins	02-64					
  							
SPECIFY PLATING CODE XX=		11 	13 	91	93	41 	43 
Sleeve (Pin)		0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

## SERIES 380 & 480 • 2,54 GRID LOW PROFILE SOLDER CUP HEADERS SINGLE AND DOUBLE ROW STRIPS



- Series 380 & 480 solder cup headers for low profile wire termination applications
- 0,51 diameter pins are suitable for mating with standard sockets or for through-hole soldering to the P.C.B.
- Solder cups are uniformly aligned to facilitate efficient soldering
- Accepts up to 22 AWG Stranded wire
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 380...002</b>	<b>Single Row Solder Cup Header</b>		
	380-10-0	-00-002000		
	<b>Specify number of pins</b>	10	01-64	
	<b>RoHS-2 2011/65/EU</b>	<b>XX=Plating Code See Below</b>	<b>For Electrical, Mechanical &amp; Environmental Data, See page 264</b>	
	<b>SPECIFY PLATING CODE XX=</b>	10		
	<b>Pin Plating</b>	 0,25µm Au		
<b>FIG. 2</b>	<b>Series 480...002</b>	<b>Double Row Solder Cup Header</b>		
	480-XX-0	-00-002000		
	<b>Specify number of pins</b>	10	02-72	
	<b>RoHS-2 2011/65/EU</b>	<b>XX=Plating Code See Below</b>	<b>For Electrical, Mechanical &amp; Environmental Data, See page 264</b>	
	<b>SPECIFY PLATING CODE XX=</b>	10		
	<b>Pin Plating</b>	 0,25µm Au		



# INTERCONNECTS

## SERIES 329, 380, 429, 480 • 2,54 GRID SOLDER CUP HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

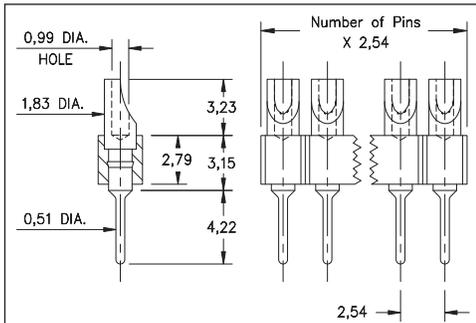


FIG. 1

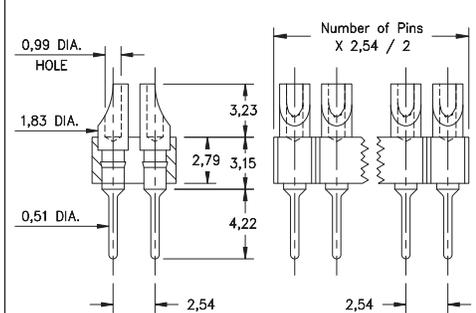


FIG. 2

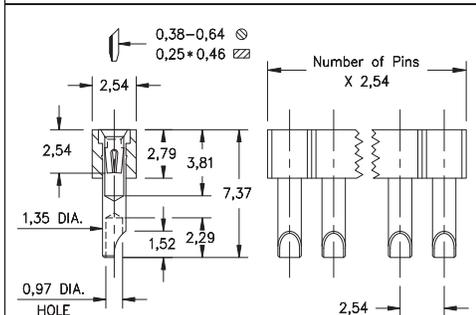


FIG. 3

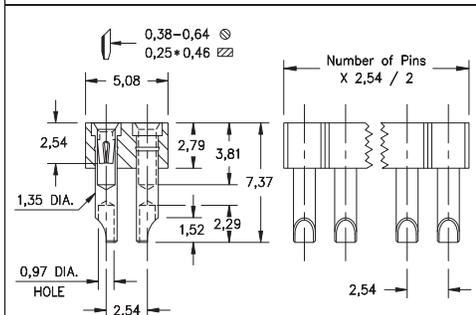


FIG. 4

- Series 380 & 480 use MM #8000 pins. See page 216 for details
- Series 329 & 429 use MM #2954 receptacles and accept pin diameters from 0,38 - 0,64. See page 171 for details
- Series 329 & 429 receptacles use Hi-Rel, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Soldercups are pre-aligned
- Insulators are high temperature thermoplastic, suitable for all soldering operations



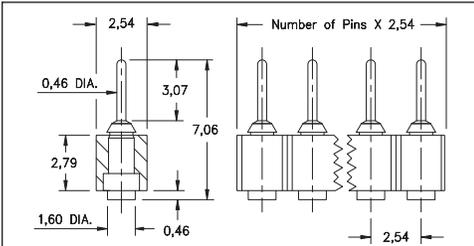
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 380...001</b>	<b>Single Row Solder Cup / Solder Tail</b>		
		380-XX-1	-00-001000	01-64
<b>FIG. 2</b>	<b>Series 480...001</b>	<b>Double Row Solder Cup / Solder Tail</b>		
		480-10-2	-00-001000	02-64
<span style="margin-left: 100px;">XX=Plating Code See Below</span> <span style="margin-left: 100px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</span>				
<b>SPECIFY PLATING CODE XX=</b>		10	90	40
<b>Pin Plating</b>		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

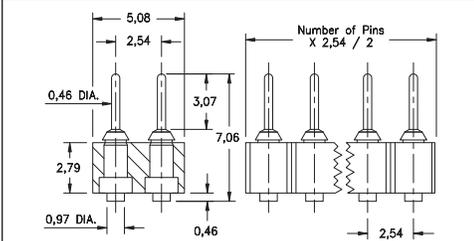
<b>FIG. 3</b>	<b>Series 329...540</b>	<b>Single Row Solder Cup Sockets</b>			
		329-XX-1	-41-540000	01-64	
<b>FIG. 4</b>	<b>Series 429...540</b>	<b>Double Row Solder Cup Sockets</b>			
		429-XX-2	-41-540000	02-64	
<span style="margin-left: 100px;">XX=Plating Code See Below</span> <span style="margin-left: 100px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</span>					
<b>SPECIFY PLATING CODE XX=</b>		11	13	41	43
<b>Sleeve (Pin)</b>		0,25µm Au	0,25µm Au	5,08µm Sn	5,08µm Sn
<b>Contact (Clip)</b>		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

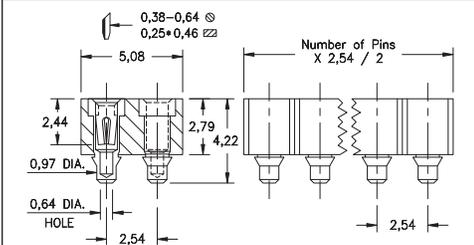
## SERIES 329, 340, 406, 414, 429 • 2,54 GRID SURFACE MOUNT HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



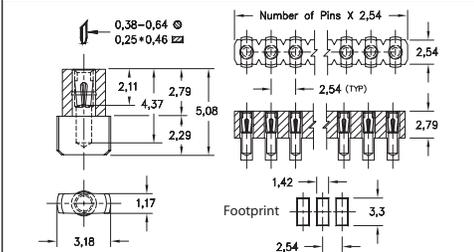
**FIG. 1**



**FIG. 2**

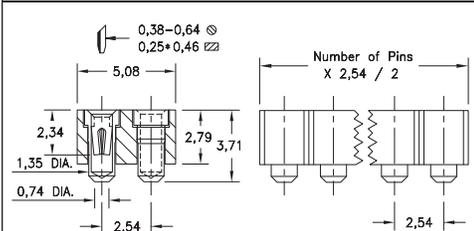


**FIG. 3**



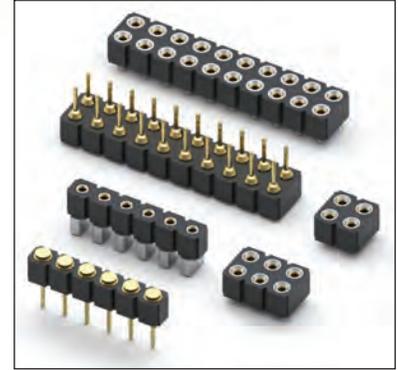
Coplanarity 0,13. For pin counts >24 positions, consult Technical Support.

**FIG. 4**



**FIG. 5**

- Series 329 and 429 pin interconnects feature space saving, pad style SMT termination using MM #2956-X pins. See page 218 for details
- Series 429 and 414 combine for a mated height of 8,20
- Series 340, 406 and 414 surface mount sockets use MM #4078, #0668 and #1434 receptacles. See pages 162, 164 and 167 for details
- Series 340, 406 and 414 receptacles use Hi-Rel, 4-finger BeCu #30 contacts rated at 3 amps. Receptacles accept 0,38 - 0,64 diameter pins. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

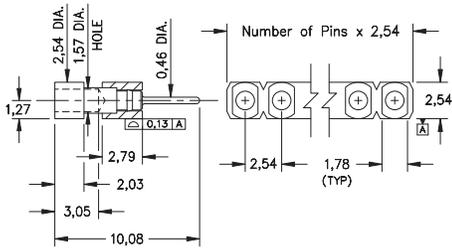
<b>FIG. 1</b>	<b>Series 329...560</b>	<b>Single Row Surface Mount Pin Header</b>					
			329-10-1__-00-560000				
		Specify number of pins	02-64				
<b>FIG. 2</b>	<b>Series 429...560</b>	<b>Double Row Surface Mount Pin Header</b>					
			429-10-2__-00-560000				
		Specify number of pins	04-72				
<b>SPECIFY PLATING CODE XX=</b>			10				
<b>Pin Plating</b>				0,25µm Au			
<b>FIG. 3</b>	<b>Series 414...117</b>	<b>Double Row Surface Mount Socket</b>					
			414-XX-2__-41-117000				
		Specify number of pins	04-72				
<b>FIG. 4</b>	<b>Series 340...780</b>	<b>Single Row Surface Mount Socket</b>					
			340-XX-1__-30-780100				
		Specify number of pins	02-64				
<b>FIG. 5</b>	<b>Series 406...068</b>	<b>Double Row Surface Mount Socket</b>					
			406-43-2__-30-068000				
		Specify number of pins	04-20				
			<b>Tape and Reel Packaging</b>				
			<b>Ordering Information:</b> 406-43-2XX-30-068001				
			Available on 44mm wide tape, 355 parts per 330mm reel				
					<b>XX=Plating Code</b> See Below		
			<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>				
<b>SPECIFY PLATING CODE XX=</b>				99	41	43	44
<b>Sleeve (Pin)</b>				5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
<b>Contact (Clip)</b>				2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn



# INTERCONNECTS

## SERIES 310, 330, 351 • 2,54 GRID (0,46 DIA. PINS), SURFACE MOUNT HEADERS AND SOCKETS • SINGLE ROW STRIPS

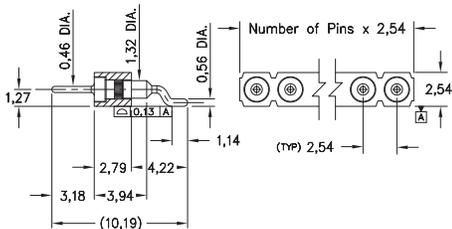
### Mates with Series 310...023 Surface Mount Z-Bend Socket (See Fig. 3)



Coplanarity 0,13. For pin counts >10 positions, consult Technical Support.

**FIG. 1**

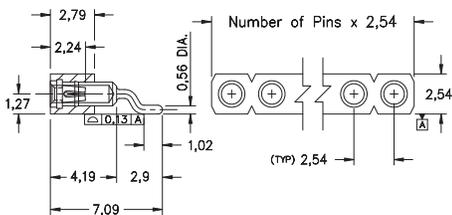
### Mates with Series 310...023 Surface Mount Z-Bend Socket (See Fig. 3)



Coplanarity 0,13. For pin counts >10 positions, consult Technical Support.

**FIG. 2**

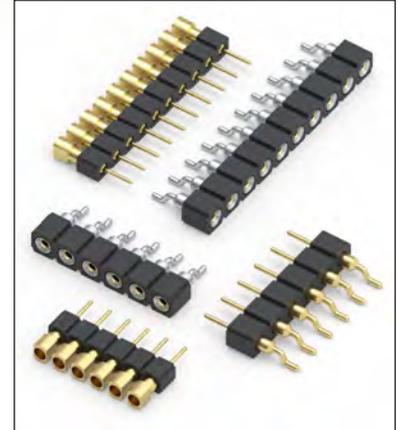
### Mates with Series 351...002 and 330...027 Surface Mount Header (See Fig. 1 & 2)



Coplanarity 0,13. For pin counts >10 positions, consult Technical Support.

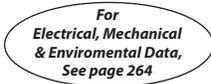
**FIG. 3**

- Series 351 horizontal surface mount headers are available with 0,46 dia. pluggable pins (MM #5102). Series 330 horizontal surface mount z-bend headers use MM #3027 pins. See page 224 for details
- Series 310 horizontal surface mount Z-Bend sockets uses MM #1023 receptacles that accept pin diameters from 0,38 - 0,64. See pages 171 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- Ideal for daisy chaining parallel boards



## ORDERING INFORMATION

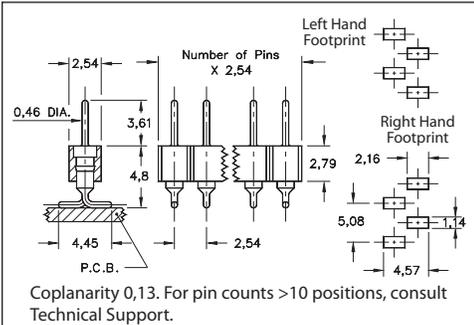
<b>FIG. 1</b>	<b>Series 351...002</b>	<b>0,46 Dia. Surface Mount Header</b>	
	351-10-1	-40-002000	02-10
<b>FIG. 2</b>	<b>Series 330...027</b>	<b>0,46 Dia. Surface Mount Z-Bend Header</b>	
	330-XX-1	-40-027000	02-10
  			
<b>SPECIFY PLATING CODE XX=</b>		10 	40 
Pin Plating 		0,25µm Au	5,08µm Sn

<b>FIG. 3</b>	<b>Series 310...023</b>	<b>0,46 Dia. Surface Mount Z-Bend Socket</b>					
	310-XX-1	-40-023000	02-10				
  							
<b>SPECIFY PLATING CODE XX=</b>		91	93	99	41 	43 	44 
Sleeve (Pin) 		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip) 		0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn

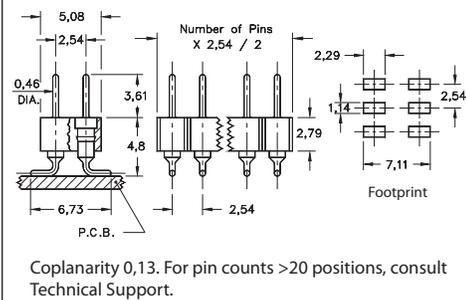


# INTERCONNECTS

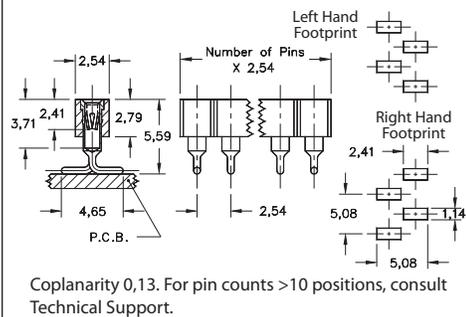
## SERIES 310, 350, 410, 450 • 2,54 GRID (0,46 DIA. PINS), SMT GULL WING HEADERS & SOCKETS • SINGLE AND DOUBLE ROW STRIPS



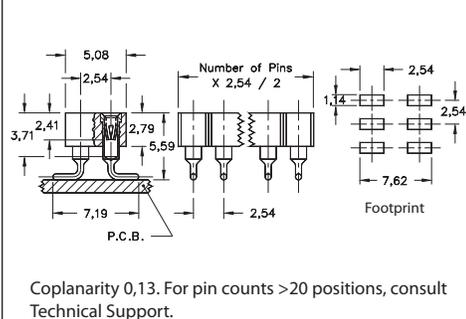
**FIG. 1**



**FIG. 2**

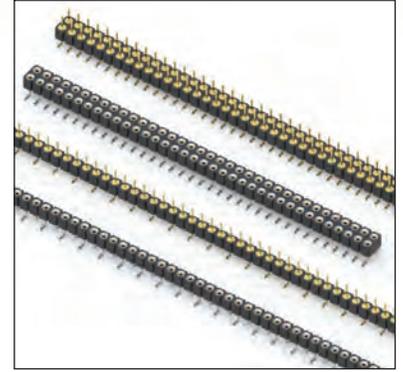


**FIG. 3**

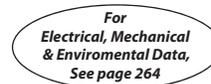


**FIG. 4**

- Headers (350 & 450) use MM #3404 pins. See page 212 for details
- Sockets (310 & 410) use MM #1005 receptacles and accept pin diameters from 0,38 - 0,64. See page 166 for details
- Contact is rated at 3 amps
- Coplanarity 0,13 (single row max. 10 pins; double row max. 20 pins). For higher pin counts, contact Technical Support
- Insulators are high temperature thermoplastic, suitable for all soldering operations

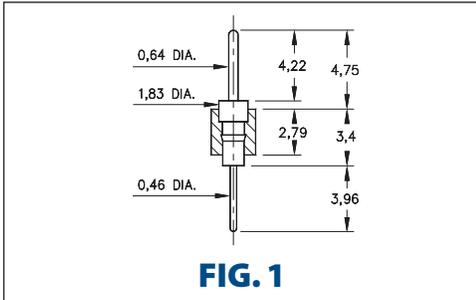


### ORDERING INFORMATION

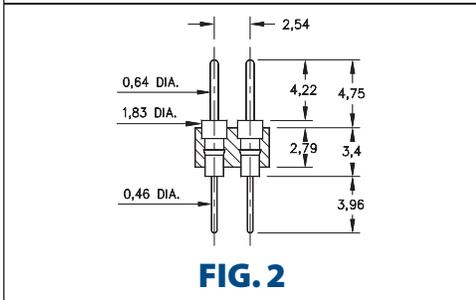
<b>FIG. 1L</b>	<b>Single Row Header, Left Hand Footprint, Odd or Even # of pins</b>				
	350-XX-1__-00-106000 Specify number of pins ↑ 02-64				
<b>FIG. 1R</b>	<b>Single Row Header, Right Hand Footprint, Even # of pins</b>				
	350-XX-1__-00-107000 Specify number of pins ↑ 02-64				
<b>FIG. 2</b>	<b>Double Row Header, Even # of pins</b>				
	450-XX-2__-00-106000 Specify number of pins ↑ 04-72				
<b>SPECIFY PLATING CODE XX=</b>		10 ◆	90	40 ◆	
<b>Pin Plating</b> 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	
<b>FIG. 3L</b>	<b>Single Row Socket, Left Hand Footprint, Odd or Even # of pins</b>				
	310-XX-1__-41-105000 Specify number of pins ↑ 02-64				
<b>FIG. 3R</b>	<b>Single Row Socket, Right Hand Footprint, Even # of pins</b>				
	310-XX-1__-41-107000 Specify number of pins ↑ 02-64				
<b>FIG. 4</b>	<b>Double Row Socket, Even # of pins</b>				
	410-XX-2__-41-105000 Specify number of pins ↑ 04-72				
					
<b>SPECIFY PLATING CODE XX=</b>		91	93	41 ◆	43 ◆
<b>Sleeve (Pin)</b> 		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
<b>Contact (Clip)</b> 		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

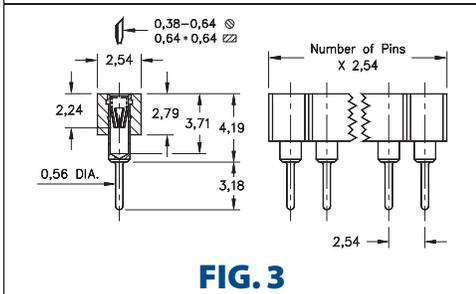
## SERIES 350, 450, 801, 803 • 2,54 GRID (0,64 DIA. PINS), LOW PROFILE HEADERS & VERSATILE SOCKETS • SINGLE & DOUBLE ROW STRIPS



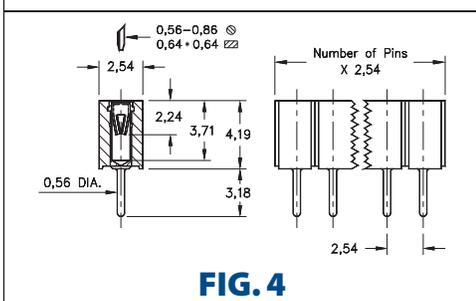
**FIG. 1**



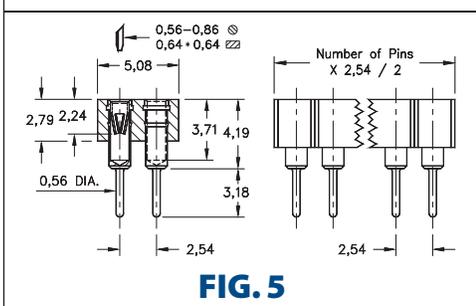
**FIG. 2**



**FIG. 3**

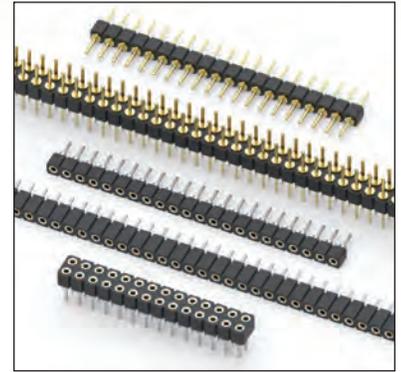


**FIG. 4**



**FIG. 5**

- Series 350 and 450 single and double row pin headers use MM #0290 pins. See page 215 for details
- Series 801 and 803 single and double row low profile sockets use MM #1303 receptacles. See page 180 for details
- Series 801 and 803 receptacles use Hi-Rel, 6-finger BeCu #16 contact rated at 4.5 amps. Receptacles accept 0,64 diameter and 0,64 square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



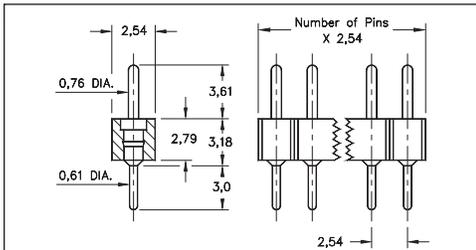
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 350...001</b>	<b>Single Row 0,64 Pin / 0,46 Solder Tail</b>		
		350-XX-1	-00-001000	
	<b>Specify number of pins</b>		01-64	
<b>FIG. 2</b>	<b>Series 450...001</b>	<b>Double Row 0,64 Pin / 0,46 Solder Tail</b>		
		450-XX-2	-00-001000	
	<b>Specify number of pins</b>		04-64	
		<b>XX=Plating Code</b> See Below		<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 
Pin Plating 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn
<b>FIG. 3</b>	<b>Series 801...003</b>	<b>Low Profile Socket (short insulator)</b>		
		801-XX-0	-10-003000	
	<b>Specify number of pins</b>		01-64	
<b>FIG. 4</b>	<b>Series 801...013</b>	<b>Low Profile Socket (long insulator)</b>		
		801-XX-0	-10-013000	
	<b>Specify number of pins</b>		01-36	
<b>FIG. 5</b>	<b>Series 803...003</b>	<b>Double Row Low Profile Socket</b>		
		803-XX-0	-10-003000	
	<b>Specify number of pins</b>		04-72	
		<b>XX=Plating Code</b> See Below		<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>
<b>SPECIFY PLATING CODE XX=</b>				41 
Sleeve (Pin) 				5,08µm Sn 5,08µm Sn
Contact (Clip) 				0,25µm Au 0,76µm Au

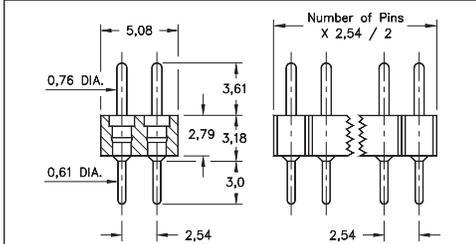


# INTERCONNECTS

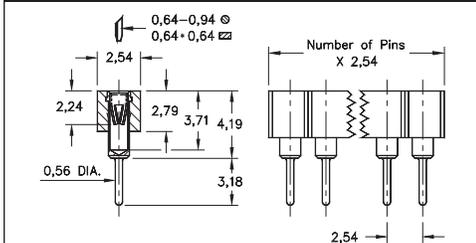
## SERIES 800, 801, 802, 803 • 2,54 GRID (0,76 DIA. PINS), LOW PROFILE HEADERS & VERSATILE SOCKETS • SINGLE & DOUBLE ROW STRIPS



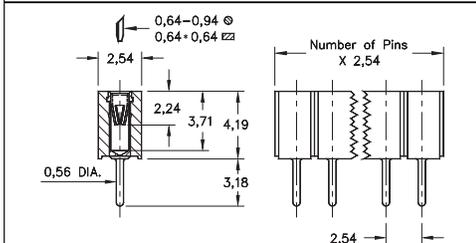
**FIG. 1**



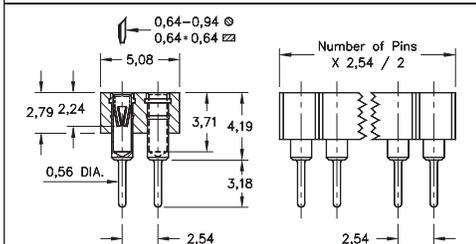
**FIG. 2**



**FIG. 3**

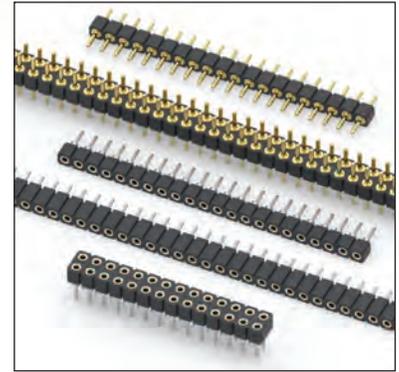


**FIG. 4**



**FIG. 5**

- Series 800 and 802 single and double row pin headers use MM #5016 pins. See page 215 for details
- Series 801 and 803 single and double row sockets use MM #1303 receptacles. See page 180 for details
- Series 801 and 803 receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept 0,76 diameter and 0,64 square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



## ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 800...002</b>	<b>Single Row Low Profile Pin Header</b>					
	800-XX-0__-10-002000	Specify number of pins $\uparrow$ 01-64					
<b>FIG. 2</b>	<b>Series 802...002</b>	<b>Double Row Low Profile Pin Header</b>					
	802-XX-0__-10-002000	Specify number of pins $\uparrow$ 04-64					
		<b>XX=Plating Code</b> See Below		<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>			
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 			
Pin Plating 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn			
<b>FIG. 3</b>	<b>Series 801...002</b>	<b>Low Profile Socket (short insulator)</b>					
	801-XX-0__-10-002000	Specify number of pins $\uparrow$ 01-64					
<b>FIG. 4</b>	<b>Series 801...012</b>	<b>Low Profile Socket (long insulator)</b>					
	801-XX-0__-10-012000	Specify number of pins $\uparrow$ 01-36					
<b>FIG. 5</b>	<b>Series 803...002</b>	<b>Double Row Low Profile Socket</b>					
	803-XX-0__-10-002000	Specify number of pins $\uparrow$ 04-72					
		<b>XX=Plating Code</b> See Below		<i>For Electrical, Mechanical &amp; Environmental Data, See page 264</i>			
<b>SPECIFY PLATING CODE XX=</b>		91	93	99	41 	43 	47 
Sleeve (Pin) 		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip) 		0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	Au Flash

# INTERCONNECTS

## SERIES 800 & 801 • 2,54 GRID (0,76 DIA. PINS), STRAIGHT & RIGHT ANGLE HEADERS AND SOCKETS • SINGLE ROW STRIPS

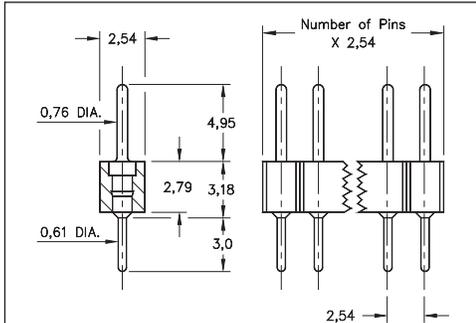


FIG. 1

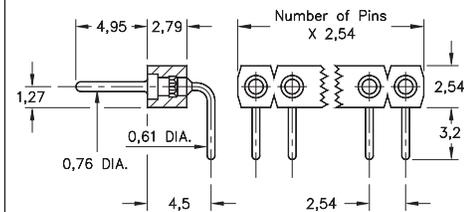


FIG. 2

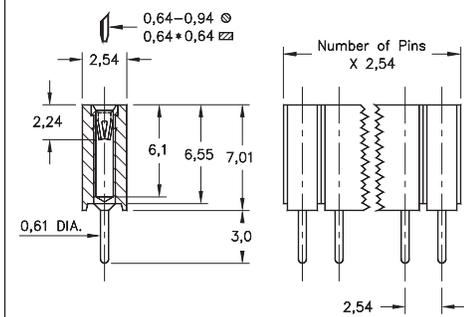


FIG. 3

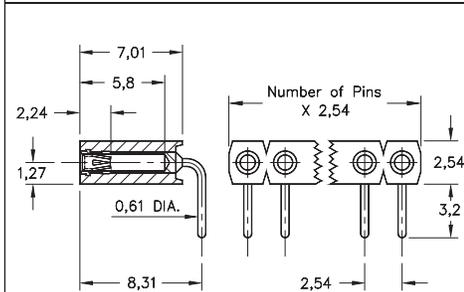
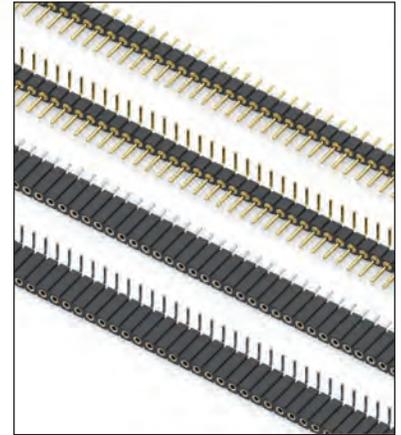


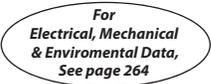
FIG. 4

- Pin interconnects available with straight MM #7007 or right angle MM #5005 solder tails. See page 215 for details
- Sockets are available with straight MM #1304 or right angle MM #1305 soldertails. See pages 177 and 179 for details
- MM #1304 and MM #1305 receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept 0,76 diameter and 0,64 square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 800...10-001</b>	<b>Straight Pin Header</b>		
	800-XX-0-10-001000	Specify number of pins: 01-64		
<b>FIG. 2</b>	<b>Series 800...20-001</b>	<b>Right Angle Pin Header</b>		
	800-XX-0-20-001000	Specify number of pins: 02-64		
  				
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 
<b>Pin Plating</b> 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

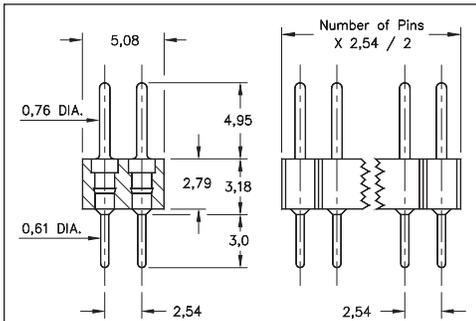
<b>FIG. 3</b>	<b>Series 801...10-001</b>	<b>Straight Socket</b>						
	801-XX-0-10-001000	Specify number of pins: 01-50						
<b>FIG. 4</b>	<b>Series 801...20-001</b>	<b>Right Angle Socket</b>						
	801-XX-0-20-001000	Specify number of pins: 01-50						
  								
<b>SPECIFY PLATING CODE XX=</b>		91	93	99	41 	43 	44 	47 
<b>Sleeve (Pin)</b> 		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	5,08µm Sn
<b>Contact (Clip)</b> 		0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn	Au Flash

★ 44 Plating Non-Standard

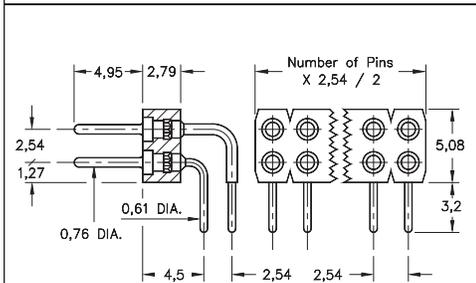


# INTERCONNECTS

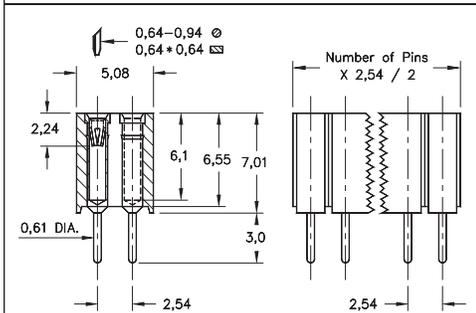
## SERIES 802 & 803 • 2,54 GRID (0,76 DIA. PINS), STRAIGHT & RIGHT ANGLE HEADERS AND SOCKETS • DOUBLE ROW STRIPS



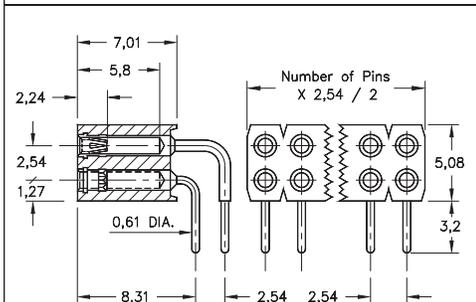
**FIG. 1**



**FIG. 2**

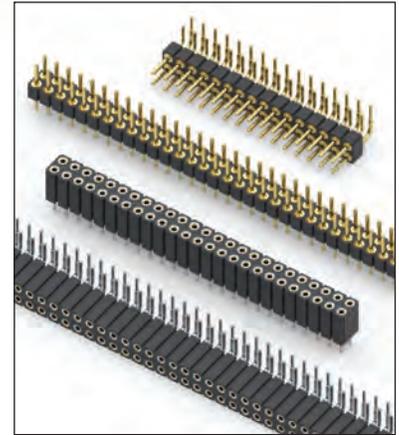


**FIG. 3**



**FIG. 4**

- Pin interconnects available with straight MM #7007 or right angle MM #5005/5107 solder tails. See page 215 for details
- Sockets are available with straight MM #1304 or right angle MM #1305/1306 soldertails. See pages 177 and 179 for details
- MM #1304, #1305 and #1306 receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept 0,76 diameter and 0,64 square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



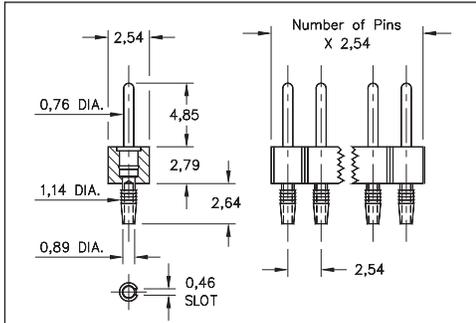
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 802...10-001</b>	<b>Straight Pin Header</b>		
	802-XX-0- -10-001000	Specify number of pins $\uparrow$ 04-64		
<b>FIG. 2</b>	<b>Series 802...20-001</b>	<b>Right Angle Pin Header</b>		
	802-XX-0- -20-001000	Specify number of pins $\uparrow$ 02-64		
  				
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 
Pin Plating 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

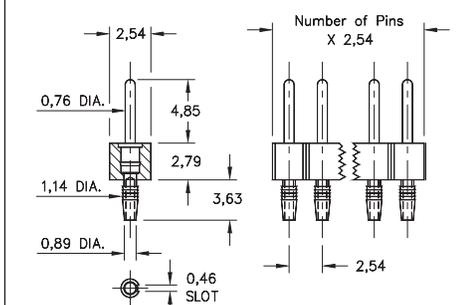
<b>FIG. 3</b>	<b>Series 803...10-001</b>	<b>Straight Socket</b>					
	803-XX- -10-001000	Specify number of pins $\uparrow$ 004-100					
<b>FIG. 4</b>	<b>Series 803...20-001</b>	<b>Right Angle Socket</b>					
	803-XX- -20-001000	Specify number of pins $\uparrow$ 002-100					
  							
<b>SPECIFY PLATING CODE XX=</b>		91	93	99	41 	43 	47 
Sleeve (Pin) 		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip) 		0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	Au Flash

# INTERCONNECTS

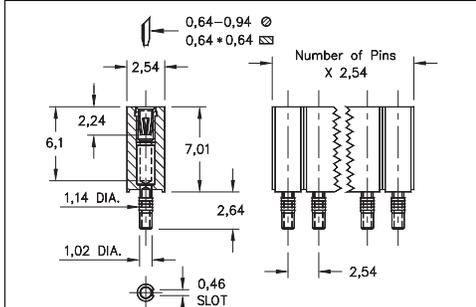
## SERIES 800 & 801 • 2,54 GRID (0,76 DIA. PINS), SOLDERLESS PRESS-FIT • SINGLE ROW STRIPS



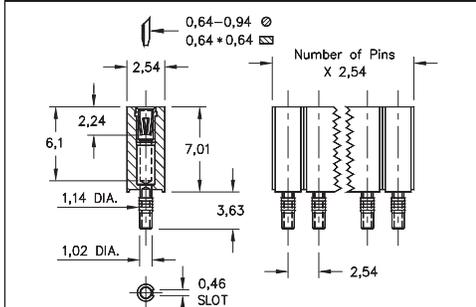
**FIG. 1**



**FIG. 2**

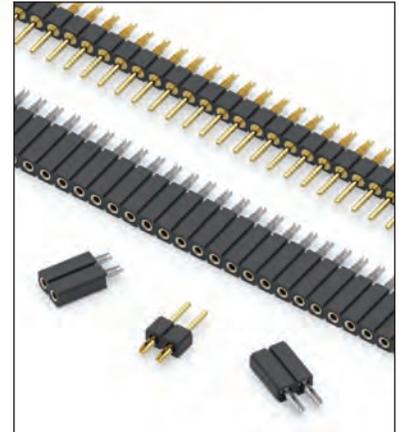


**FIG. 3**



**FIG. 4**

- The unique compliant tail pins conform to  $1,02 \pm 0,76$  finished hole without stressing inner layers. Patent No. 4,799,904
- Headers and sockets are available for board thicknesses of 1,52 - 2,54 and 2,29 - 3,3. See ordering information for details
- Series 800 pin headers use MM #5601 and #5602 compliant tail pins featuring a 0,76 dia. mating lead. See page 220 for details
- Series 801 sockets MM #4614 or #4615 use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept 0,76 diameter pins & 0,64 square pins. See pg. 256 for details
- Insulators are high temperature thermoplastic



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Compliant Tail Pin Header for 1,52 - 2,54 Thick Boards</b>			
	800-XX-0__-61-001000 Specify number of pins    01-64			
<b>FIG. 2</b>	<b>Compliant Tail Pin Header for 2,29 - 3,3 Thick Boards</b>			
	800-XX-0__-62-001000 Specify number of pins    01-64			
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS - 2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>				
<b>SPECIFY PLATING CODE XX=</b>				
Pin Plating				
	10	90	40	
	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	

<b>FIG. 3</b>	<b>Compliant Tail Socket for 1,52 - 2,54 Thick Boards</b>				
	801-XX-0__-61-001000 Specify number of pins    01-50				
<b>FIG. 4</b>	<b>Compliant Tail Socket for 2,29 - 3,3 Thick Boards</b>				
	801-XX-0__-62-001000 Specify number of pins    01-50				
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS - 2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>					
<b>SPECIFY PLATING CODE XX=</b>					
Sleeve (Pin)					
Contact (Clip)					
	91	93	99	41	43
	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au



# INTERCONNECTS

## SERIES 802 & 803 • 2,54 GRID (0,76 DIA. PINS), SOLDERLESS PRESS-FIT • DOUBLE ROW STRIPS

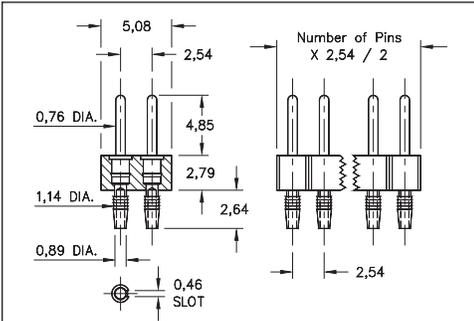


FIG. 1

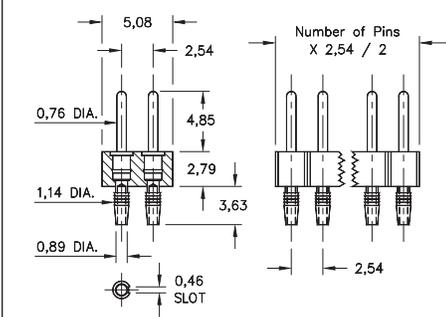


FIG. 2

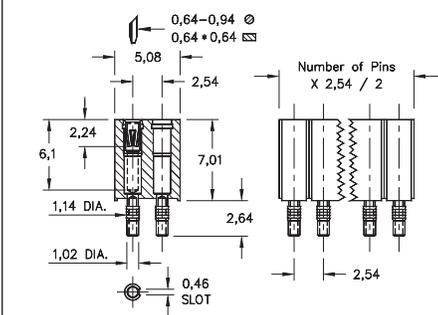


FIG. 3

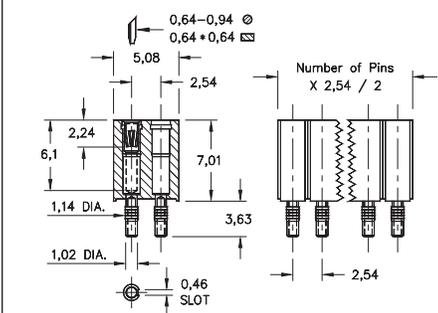
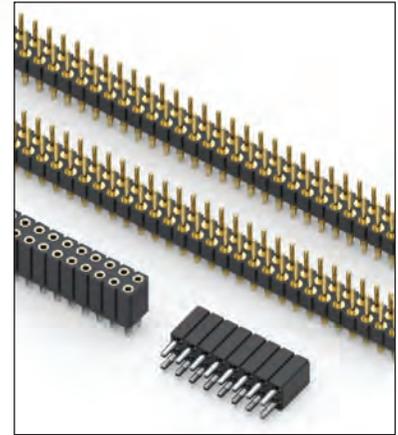


FIG. 4

- The unique compliant tail pins conform to  $1,02 \pm 0,76$  finished hole without stressing inner layers. Patent No. 4,799,904
- Headers and sockets are available for board thicknesses of 1,52 - 2,54 and 2,29 - 3,3. See ordering information for details
- Series 802 pin headers use MM #5601 and #5602 compliant tail pins featuring a 0,76 dia. mating lead. See page 220 for details
- Series 803 sockets with MM #4614 or #4615 pins use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept 0,76 diameter pins & 0,64 square pins. See pg. 256 for details
- Insulators are high temperature thermoplastic



### ORDERING INFORMATION

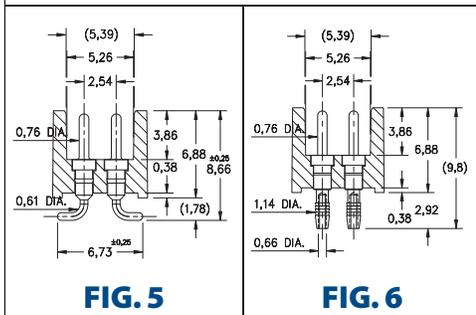
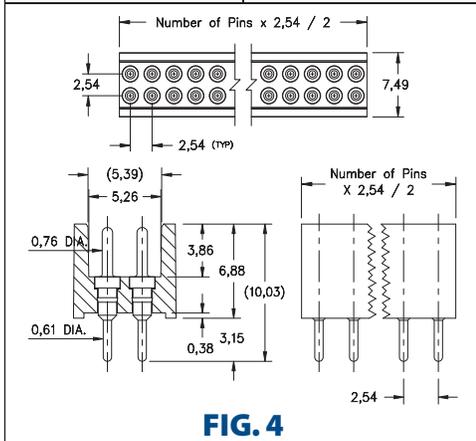
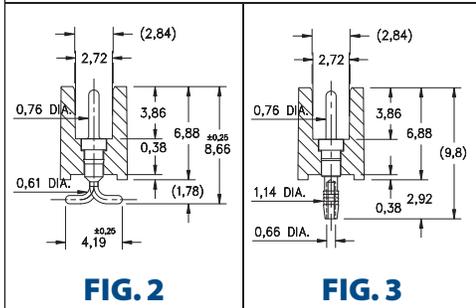
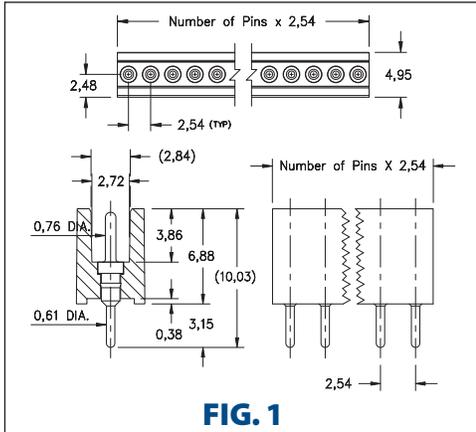
FIG. 1	<b>Compliant Tail Pin Header for 1,52 - 2,54 Thick Boards</b>			
	802-XX-0__-61-001000 Specify number of pins      04-64			
FIG. 2	<b>Compliant Tail Pin Header for 2,29 - 3,3 Thick Boards</b>			
	802-XX-0__-62-001000 Specify number of pins      04-64			
<span style="margin-left: 100px;">XX=Plating Code See Below</span> <span style="margin-left: 100px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</span>				
<b>SPECIFY PLATING CODE XX=</b>				
Pin Plating				
	10	90	40	
	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	

FIG. 3	<b>Compliant Tail Socket for 1,52 - 2,54 Thick Boards</b>							
	803-XX-__-61-001000 Specify number of pins      004-100							
FIG. 4	<b>Compliant Tail Socket for 2,29 - 3,3 Thick Boards</b>							
	803-XX-__-62-001000 Specify number of pins      004-100							
<span style="margin-left: 100px;">XX=Plating Code See Below</span> <span style="margin-left: 100px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</span>								
<b>SPECIFY PLATING CODE XX=</b>								
Sleeve (Pin)								
Contact (Clip)								
	11	13	91	93	99	41	43	44
	0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn

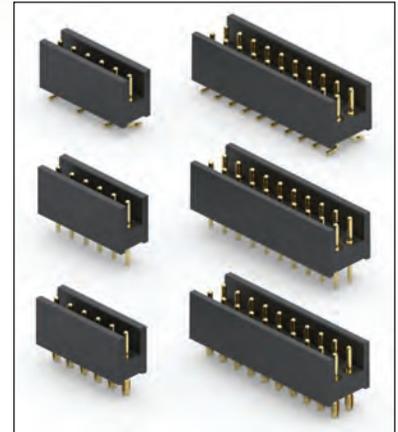


# INTERCONNECTS

## SERIES 800 & 802 • 2,54 GRID (0,76 DIA. PINS), SHROUDED STRAIGHT, SURFACE MOUNT & SOLDERLESS PRESS-FIT • SINGLE AND DOUBLE ROW STRIPS



- Shrouded pin interconnects available with straight Series 800...10-052 and 802...10-052 or surface mount 800...30-052 and 802...30-052 use MM #5016 pins. See page 215 for details
- Shrouded pin interconnects with solderless press-fit Series 800...61-051 and 802...61-051 use MM #5607 pins. See page 213 for details. The unique compliant tail pins conform to 1,02±0,07 finished hole without stressing inner layers. Patent No. 4,799,904
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 800...10-052	Straight Pin Header
<b>FIG. 1</b>	800-10-0	-10-052000
	Specify number of pins	01-32
<b>FIG. 2</b>	Series 800...30-052	Surface Mount Pin Header
	800-10-0	-30-052000
	Specify number of pins	03-32
<b>FIG. 3</b>	Series 800...61-051	Compliant Tail Pin Header
	800-10-0	-61-051000
	Specify number of pins	01-32
<b>FIG. 4</b>	Series 802...10-052	Straight Pin Header
	802-10-0	-10-052000
	Specify number of pins	04-64
<b>FIG. 5</b>	Series 802...30-052	Surface Mount Pin Header
	802-10-0	-30-052000
	Specify number of pins	04-64
<b>FIG. 6</b>	Series 802...61-051	Compliant Tail Pin Header
	802-10-0	-61-051000
	Specify number of pins	04-64



XX=Plating Code  
See Below

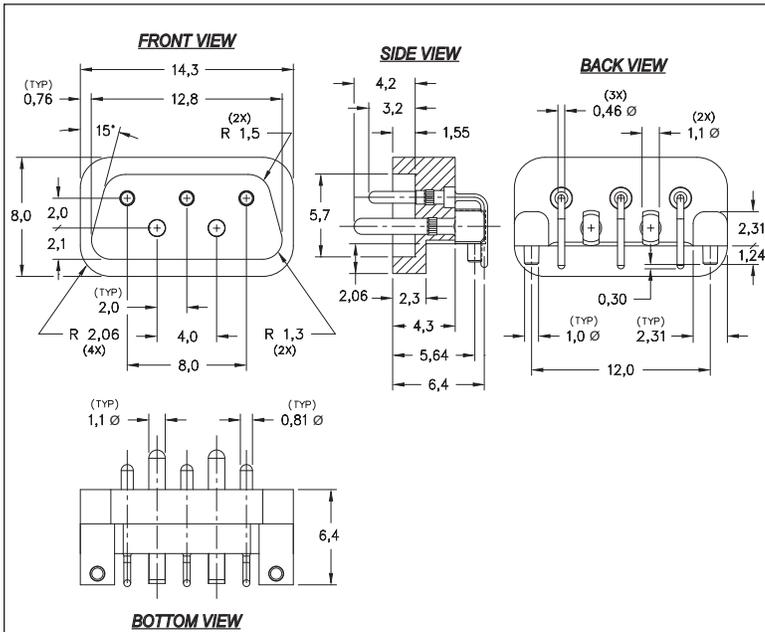
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10 ◇		
Pin Plating 	0,25µm Au		

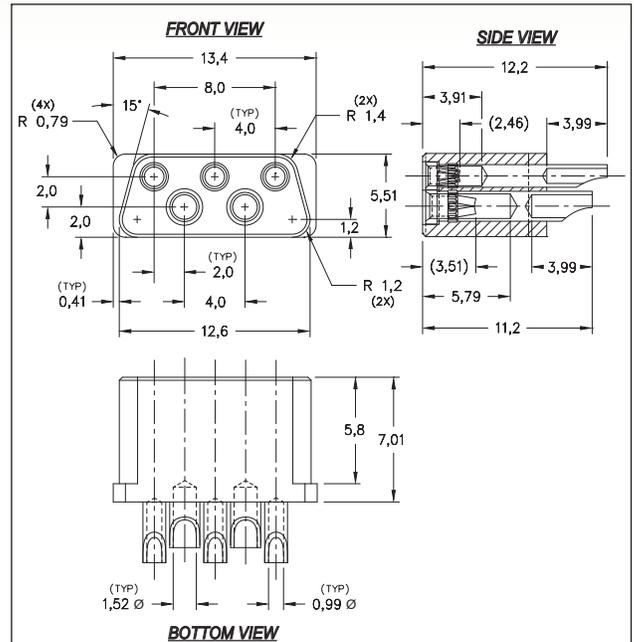


# INTERCONNECTS

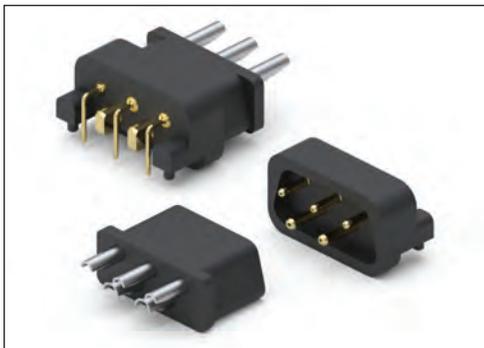
## SERIES 888 • 2MM GRID (0,81 AND 1,12 DIA. PINS), SIGNAL POWER SHROUDED HEADER & SOCKET CONNECTOR



**FIG. 1 (Right Angle Mount Header)**



**FIG. 2 (Wire Termination Socket)**



- Series 888\_002 right angle & surface mount P.C.B. headers have 0,81 & 1,12 dia. pins (MM #5065, #5066). See pages 213 and 224 for details
- Series 888\_001 mating soldercup sockets use (MM #5070-0 and #5084-0) receptacles for terminating 22 AWG & 18AWG stranded wires. See pages 176 and 185 for details
- Receptacles use Hi-Rel, 6-finger BeCu #16 contacts rated at 4.5 amps and Hi-Rel, 4-finger BeCu #34 contacts rated at 8 amps. See pages 256 and 258 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations and shrouded for accurate alignment

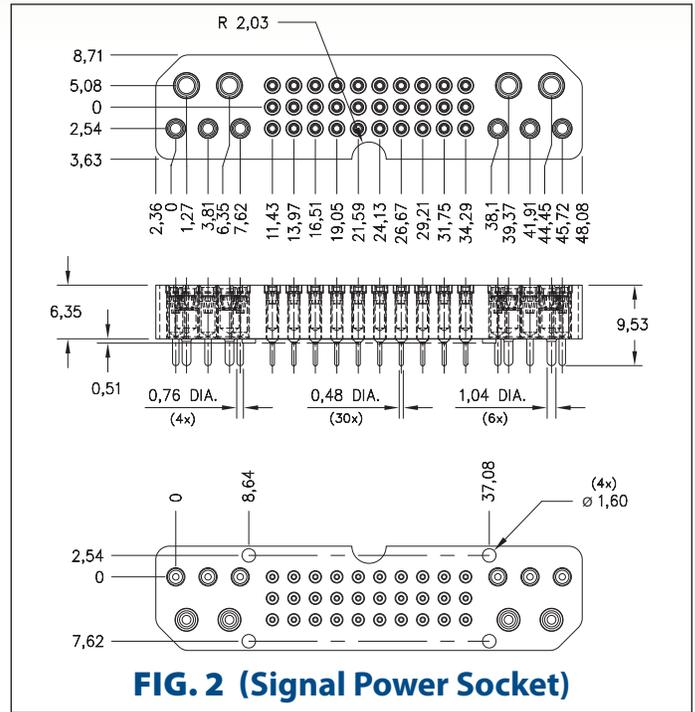
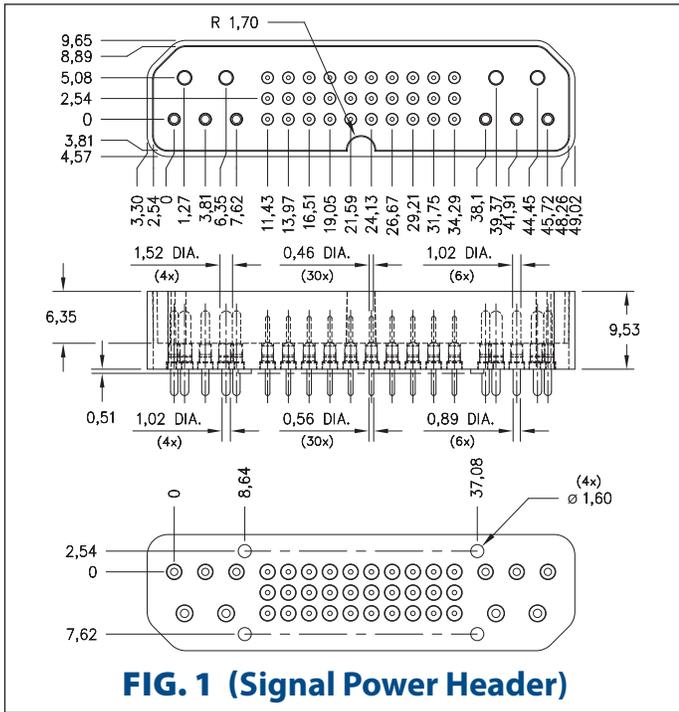
## ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 888...002</b>	<b>5 Pin Right Angle Board Mount Header</b>				
			888-30-005-20-002000			
<b>SPECIFY PLATING CODE XX=</b>			30			
Pin Plating			0,76 μm Au			
<b>FIG. 2</b>	<b>Series 888...001</b>	<b>5 Pin Wire Termination Socket</b>				
			888-93-005-00-001000			
<b>SPECIFY PLATING CODE XX=</b>			93			
Sleeve (Pin)			5,08 μm Sn/Pb			
Contact (Clip)			0,76 μm Au			



# INTERCONNECTS

## SERIES 808 & 809 • 2,54 GRID (0,46 DIA. PINS), STRAIGHT, SIGNAL POWER SHROUDED HEADER & SOCKET CONNECTOR



- Series 808 and 809 signal power header & socket have a mated height of 10,54
- Series 808 headers have 0,46 diameter (MM #3503), 1,02 diameter (MM #3502) and 1,52 diameter (MM #3501) solder tails. See pages 213 and 214 for details
- Series 809 sockets use MM #0405-0, #8852-0 and #9324-0 receptacles. See pages 170, 182 and 189 for details
- Receptacles use Hi-Rel, 4-finger BeCu #32 and #34 contacts & Hi-Rel, 6-finger BeCu #23 contacts. See pages 253, 258 and 260 for details
- Insulators are high temperature thermoplastic, suitable for most soldering processes, and feature standoffs to promote solder flow

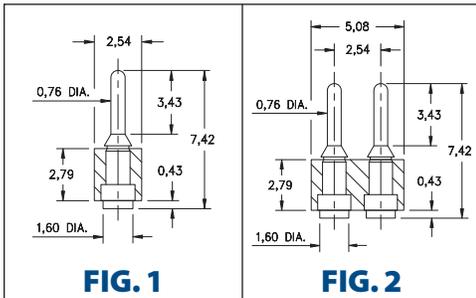
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 808...151</b>	<b>Shrouded Signal Power Header</b>
	808-10-040-10-151000	
<p>RoHS-2 2011/65/EU</p> <p>XX=Plating Code See Below</p> <p>For Electrical, Mechanical &amp; Environmental Data, See page 264</p>		
<p><b>SPECIFY PLATING CODE XX=</b> 10</p>		
<p>Pin Plating  0,25µm Au</p>		
<b>FIG. 2</b>	<b>Series 809...001</b>	<b>Signal Power Socket</b>
	809-43-040-10-001000	
<p>RoHS-2 2011/65/EU</p> <p>XX=Plating Code See Below</p> <p>For Electrical, Mechanical &amp; Environmental Data, See page 264</p>		
<p><b>SPECIFY PLATING CODE XX=</b> 43</p>		
<p>Sleeve (Pin)  5,08µm Sn</p>		
<p>Contact (Clip)  0,76µm Au</p>		



# INTERCONNECTS

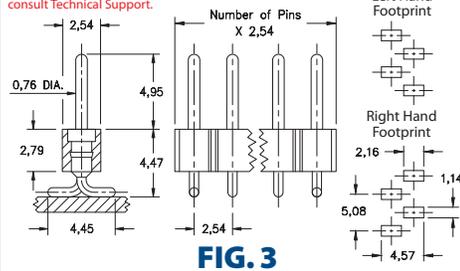
**SERIES 349, 449, 800, 801, 802, 803 • 2,54 GRID (0,76 DIA. PINS),  
SURFACE MOUNT HEADERS & SOCKETS • SINGLE AND DOUBLE ROW STRIPS**



**FIG. 1**

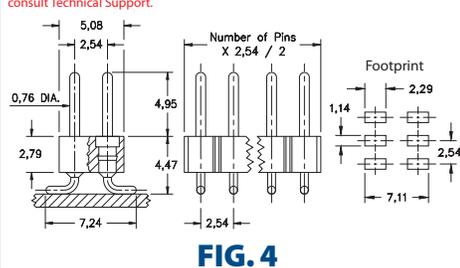
**FIG. 2**

Coplanarity 0.13. For pin counts >20 positions, consult Technical Support.



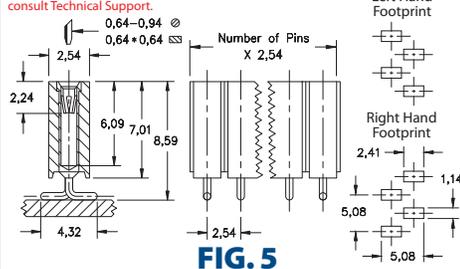
**FIG. 3**

Coplanarity 0.13. For pin counts >20 positions, consult Technical Support.



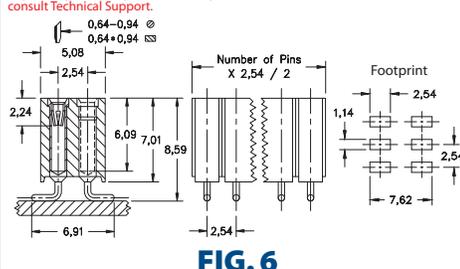
**FIG. 4**

Coplanarity 0.13. For pin counts >20 positions, consult Technical Support.



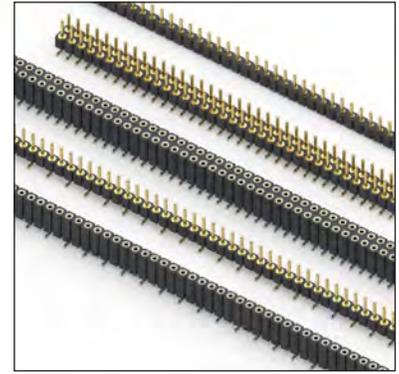
**FIG. 5**

Coplanarity 0.13. For pin counts >20 positions, consult Technical Support.



**FIG. 6**

- Series 349 & 449 use MM #4956-1 pins. See page 218 for details
- Series 800 & 802 use MM #7007 pins. See page 215 for details
- Series 801 & 803 use MM #1304 receptacles and accept pin diameters from 0,64 - 0,94 and 0,64 square pins. See page 177 for details
- Receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



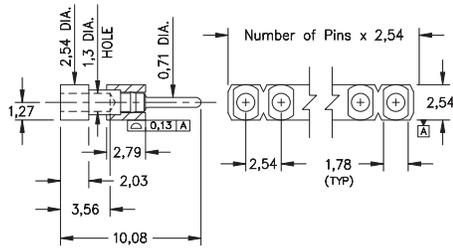
## ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 349...560</b>	<b>Single Row Surface Mount Header</b>			
			349-10-1__-00-560000		
		Specify number of pins	02-64		
<b>FIG. 2</b>	<b>Series 449...560</b>	<b>Double Row Surface Mount Header</b>			
			449-10-2__-00-560000		
		Specify number of pins	04-64		
<b>FIG. 3</b>	<b>Series 800...001</b>	<b>Single Row Surface Mount Header</b>			
			800-10-0__-30-001000		
		Specify number of pins	03-64		
<b>FIG. 4</b>	<b>Series 802...001</b>	<b>Double Row Surface Mount Header</b>			
			802-10-0__-30-001000		
		Specify number of pins	04-72		
<b>SPECIFY PLATING CODE XX=</b>			10		
<b>Pin Plating</b>			0,25µm Au		
<b>FIG. 5</b>	<b>Series 801...001</b>	<b>Single Row Surface Mount Socket</b>			
			801-43-0__-30-001000		
		Specify number of pins	03-50		
<b>FIG. 6</b>	<b>Series 803...001</b>	<b>Double Row Surface Mount Socket</b>			
			803-XX-__-30-001000		
		Specify number of pins	004-100		
			<b>XX=Plating Code See Below</b>	<b>For Electrical, Mechanical &amp; Environmental Data, See page 264</b>	
<b>SPECIFY PLATING CODE XX=</b>				93	43
<b>Sleeve (Pin)</b>				5,08µm Sn/Pb	5,08µm Sn
<b>Contact (Clip)</b>				0,76µm Au	0,76µm Au

# INTERCONNECTS

## SERIES 800, 801, 830 • 2,54 GRID (0,76 DIA. PINS), SURFACE MOUNT HEADERS AND SOCKETS • SINGLE ROW STRIPS

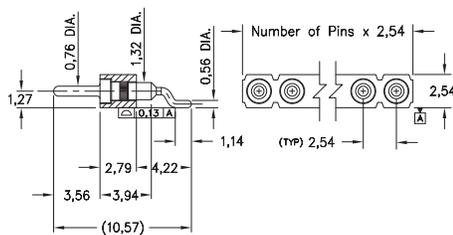
### Mates with Series 801...002 Surface Mount Z-Bend Socket (See Fig. 3)



Coplanarity 0,13. For pin counts >10 positions, consult Technical Support.

**FIG. 1**

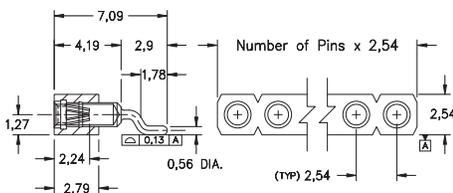
### Mates with Series 801...002 Surface Mount Z-Bend Socket (See Fig. 3)



Coplanarity 0,13. For pin counts >10 positions, consult Technical Support.

**FIG. 2**

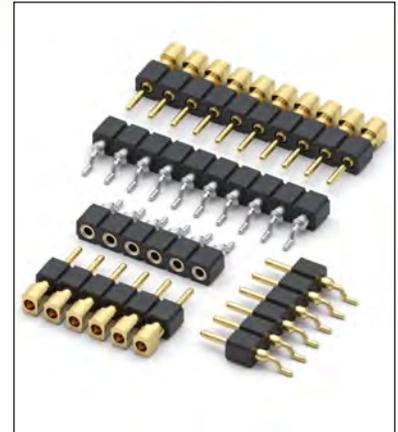
### Mates with Series 800...002 and 830...028 Surface Mount Header (See Fig. 1 & 2)



Coplanarity 0,13. For pin counts >10 positions, consult Technical Support.

**FIG. 3**

- Series 800 horizontal surface mount headers are available with 0,71 dia. pluggable pins (MM #1502). Series 830 horizontal surface mount z-bend headers use MM #3028 pins. See page 224 for details
- Series 801 horizontal surface mount Z-Bend sockets uses MM #1303 receptacles that accept pin diameters from 0,64 - 0,94 and 0,64 square leads. See pages 180 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- Ideal for daisy chaining parallel boards



## ORDERING INFORMATION

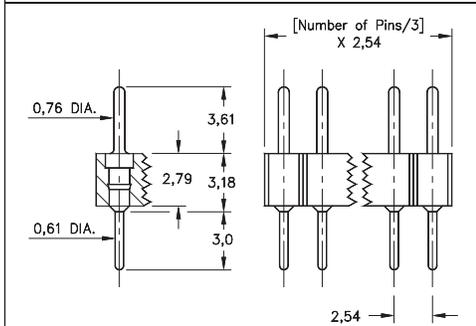
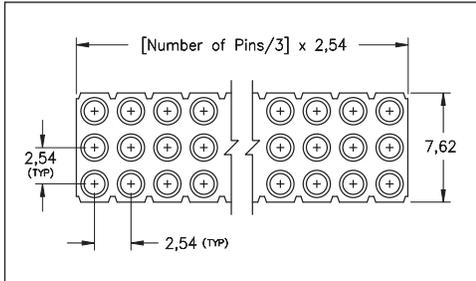
<b>FIG. 1</b>	<b>Series 800...002</b> <b>0,71 Dia. Surface Mount Header</b>
	800-10-0-40-002000 Specify number of pins      02-10
<b>FIG. 2</b>	<b>Series 830...028</b> <b>0,76 Dia. Surface Mount Z-Bend Header</b>
	830-XX-0-40-028000 Specify number of pins      02-10
<span style="margin-left: 100px;">XX=Plating Code See Below</span> <span style="margin-left: 100px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</span>	
<b>SPECIFY PLATING CODE XX=</b>	
Pin Plating	10       40
	0,25µm Au      5,08µm Sn

<b>FIG. 3</b>	<b>Series 801...002</b> <b>0,71 Dia. Surface Mount Z-Bend Socket</b>
	801-XX-0-40-002000 Specify number of pins      02-10
<span style="margin-left: 100px;">XX=Plating Code See Below</span> <span style="margin-left: 100px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</span>	
<b>SPECIFY PLATING CODE XX=</b>	
Sleeve (Pin)	91      93      99      41       43       44
Contact (Clip)	5,08µm Sn/Pb      5,08µm Sn/Pb      5,08µm Sn/Pb      5,08µm Sn      5,08µm Sn      5,08µm Sn
	0,25µm Au      0,76µm Au      2,54µm Sn/Pb      0,25µm Au      0,76µm Au      2,54µm Sn

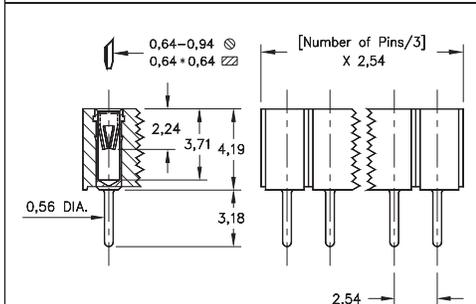
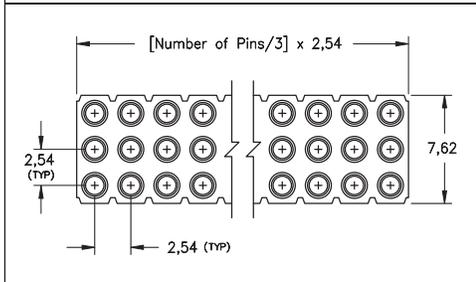


# INTERCONNECTS

## SERIES 804 & 805 • 2,54 GRID (0,76 DIA. PINS), HEADERS AND SOCKETS • TRIPLE ROW

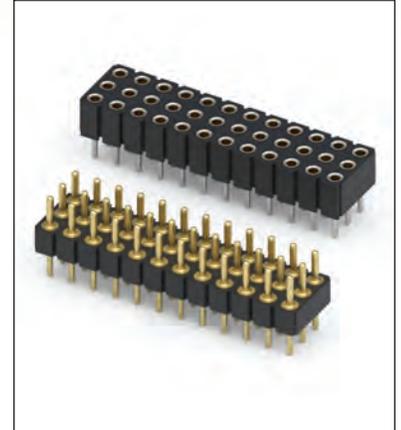


**FIG. 1**



**FIG. 2**

- Series 804 triple row 2,54 grid headers uses MM #5016 pins. See page 215 for details
- Series 805 triple row 2,54 grid sockets uses MM #1303 pins. See page 180 for details
- Series 805 triple row 2,54 grid sockets uses Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

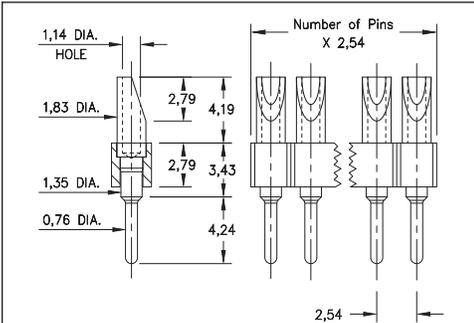


### ORDERING INFORMATION

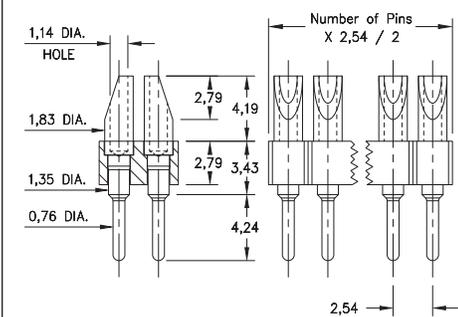
FIG. 1	Series 804...002		Straight Pin Header			
		804-10-0		-10-002000		
	Specify number of pins		09-96			
	SPECIFY PLATING CODE XX=		10			
	Pin Plating		0,25µm Au			
FIG. 2	Series 805...012		Straight Pin Socket			
		805-43-0		-10-012000		
	Specify number of pins		09-96			
	SPECIFY PLATING CODE XX=					43
	Sleeve (Pin)					5,08µm Sn
	Contact (Clip)					0,76µm Au

# INTERCONNECTS

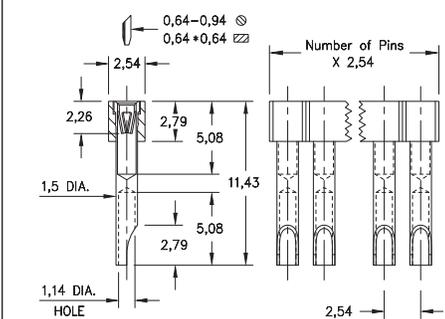
## SERIES 800, 801, 802, 803 • 2,54 GRID SOLDER CUP HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



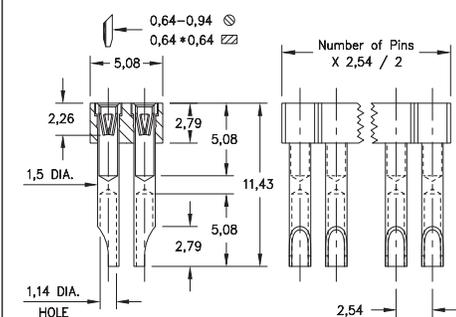
**FIG. 1**



**FIG. 2**



**FIG. 3**



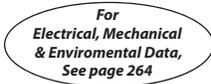
**FIG. 4**

- Series 800 and 802 use MM #1107 pins. See page 218 for details
- Series 801 and 803 use MM #1134 pin receptacles and accept pin diameters from 0,64 - 0,94 and 0,64 square pins. See page 177 for details
- Series 801 and 803 receptacles use Hi-Rel, 4-finger BeCu #47 contact rated at 4.5 amps. See page 256 for details
- Solder cups are pre-aligned and accept up to 20 AWG wire
- Insulators are high temperature thermoplastic, suitable for all soldering operations



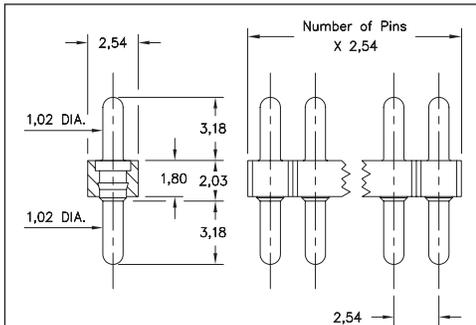
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 800...007</b> <b>Single Row Solder Cup / Solder Tail</b>
	800-XX-0__-10-007000 Specify number of pins      ↑      02-64
<b>FIG. 2</b>	<b>Series 802...007</b> <b>Double Row Solder Cup / Solder Tail</b>
	802-XX-0__-10-007000 Specify number of pins      ↑      02-64
  	
<b>SPECIFY PLATING CODE XX=</b> 10  40 	
Pin Plating 	0,25µm Au      5,08µm Sn

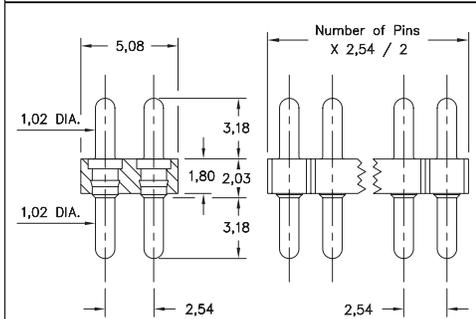
<b>FIG. 3</b>	<b>Series 801...007</b> <b>Single Row Solder Cup Sockets</b>
	801-13-0__-10-007000 Specify number of pins      ↑      02-64
<b>FIG. 4</b>	<b>Series 803...007</b> <b>Double Row Solder Cup Sockets</b>
	803-13-0__-10-007000 Specify number of pins      ↑      02-64
  	
<b>SPECIFY PLATING CODE XX=</b> 13 	
Sleeve (Pin) 	0,25µm Au
Contact (Clip) 	0,76µm Au

# INTERCONNECTS

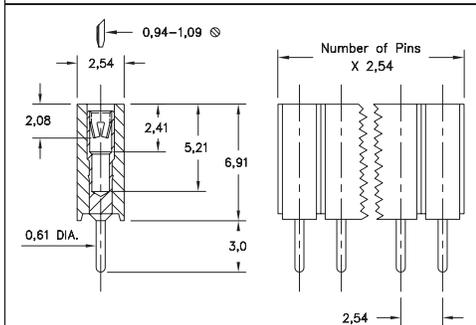
## SERIES 800, 801, 802, 803 • 2,54 GRID (1,02 DIA. PINS), HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



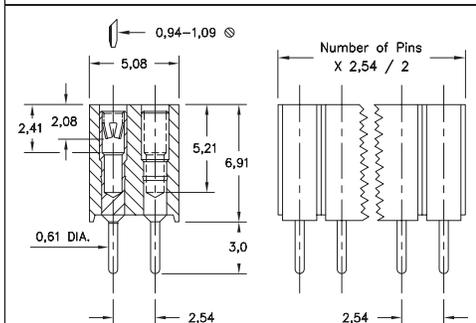
**FIG. 1**



**FIG. 2**

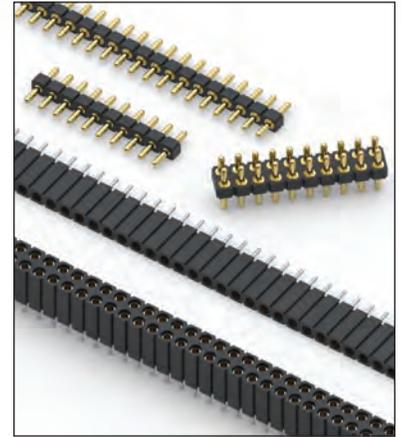


**FIG. 3**



**FIG. 4**

- Series 800 and 802 single and double row interconnects feature sturdy 1,02 dia. leads (MM #3077) and low profile (1,80 thick) insulator. See page 215 for details
- Series 801 and 803 single and double row sockets use MM #1313 receptacles. See page 181 for details
- Series 801 and 803 receptacles use Hi-Rel, 6-finger BeCu #18 contact rated at 8 amps. Receptacles accept 0,94 - 1,09 diameter pins. See page 257 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 800...10-004</b>	<b>Single Row Pin Header</b>		
	800-XX-0-10-004000	Specify number of pins $\uparrow$ 01-50		
<b>FIG. 2</b>	<b>Series 802...10-004</b>	<b>Double Row Pin Header</b>		
	802-XX-10-004000	Specify number of pins $\uparrow$ 004-100		
  				
<b>SPECIFY PLATING CODE XX=</b>		10 	90	40 
<b>Pin Plating</b> 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

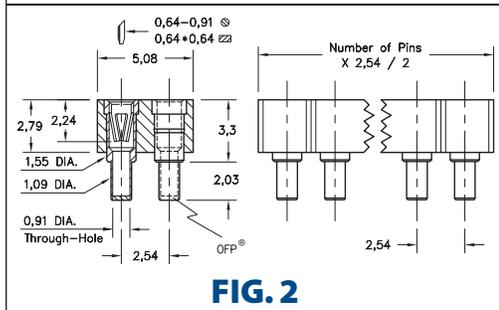
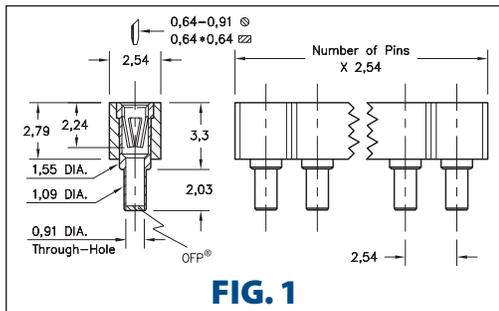
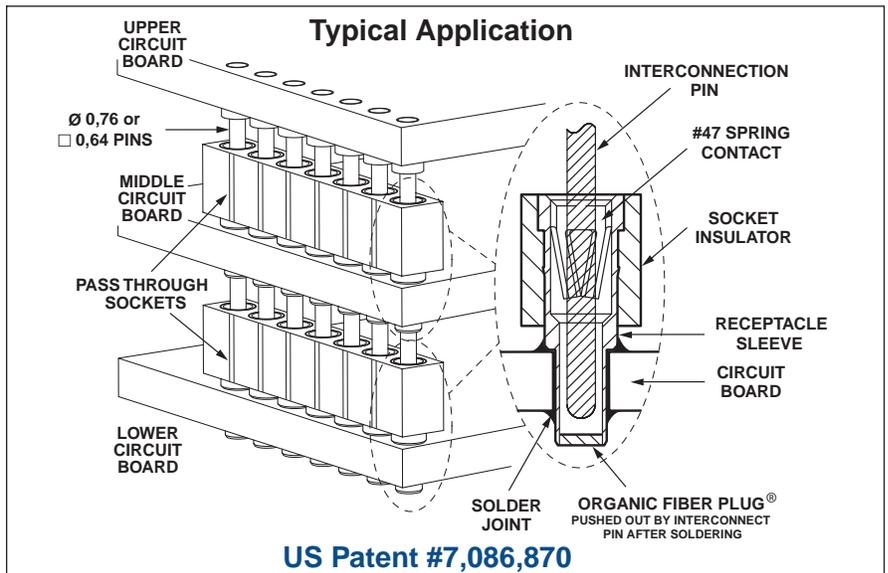
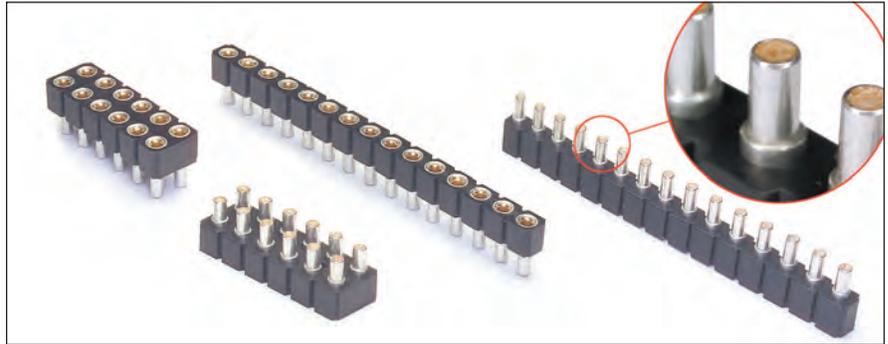
<b>FIG. 3</b>	<b>Series 801...10-004</b>	<b>Single Row Socket</b>						
	801-XX-0-10-004000	Specify number of pins $\uparrow$ 01-50						
<b>FIG. 4</b>	<b>Series 803...10-004</b>	<b>Double Row Socket</b>						
	803-XX-10-004000	Specify number of pins $\uparrow$ 004-100						
  								
<b>SPECIFY PLATING CODE XX=</b>		13 	91	93	99	41 	43 	44 
<b>Sleeve (Pin)</b> 		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
<b>Contact (Clip)</b> 		0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn

# INTERCONNECTS

## SERIES 834 & 835 • 2,54 GRID OFF® PASS-THROUGH SOCKETS Ø0,76 & □0,64 PINS • SINGLE AND DOUBLE ROW STRIPS

- 834/835 Series Pass-Through Sockets have a low 3,30 profile and will accept Ø 0,76 round pin, as well as industry standard 0,64 square pin headers.
- They are typically used to interconnect two or more parallel circuit boards.
- Sockets are designed for hand, wave or reflow\* soldering. The high temperature insulator is compatible with all solder processes.
- Unique ORGANIC FIBRE PLUG® barriers prevent solder, paste or flux from contaminating the internal spring contacts. After soldering, the OFF® barriers are pushed out of the socket when the mating header is inserted.
- Mill-Max sockets use a receptacle consisting of a precision-machined brass sleeve with a press-fit beryllium copper "multi-finger" spring contact.
- Recommended mounting holes are Ø1,17 ±0,08 PTH (1,2 mm drilled prior to plating).

\*Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The pass-through socket is placed into plated through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated through-holes and achieve solder joints as reliable as wave soldering. The OFF® barrier prevents solder paste from being picked up inside the contact during assembly.



## ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 834...001 Single Row OFF® Pass-Through Socket</b>	834-XX-0 -10-001000
	Specify number of pins	01-64
<b>FIG. 2</b>	<b>Series 835...001 Double Row OFF® Pass-Through Socket</b>	835-XX-0 -10-001000
	Specify number of pins	04-72
<b>SPECIFY PLATING CODE XX=</b>		93
Sleeve (Pin)		5,08µm Sn/Pb
Contact (Clip)		0,76µm Au
		43
		47
		5,08µm Sn
		0,76µm Au
		Au Flash



# INTERCONNECTS

## SERIES 800 & 801 • 5,08 GRID (0,76 DIA. PINS), STRAIGHT AND RIGHT ANGLE • SINGLE ROW STRIPS

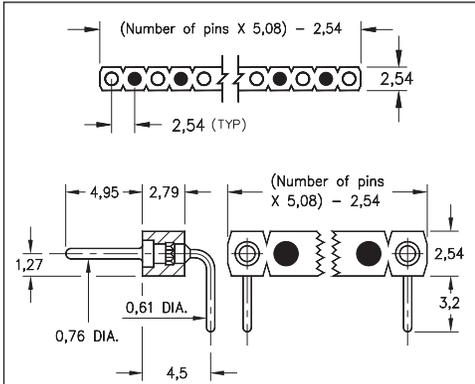


FIG. 1

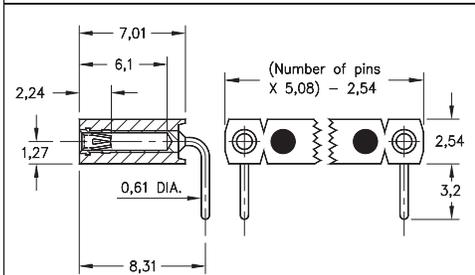


FIG. 2

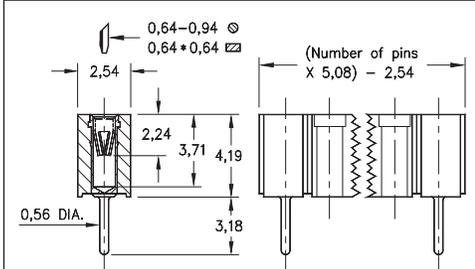


FIG. 3

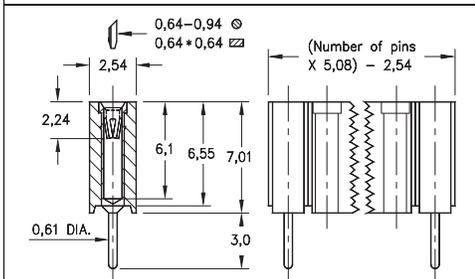
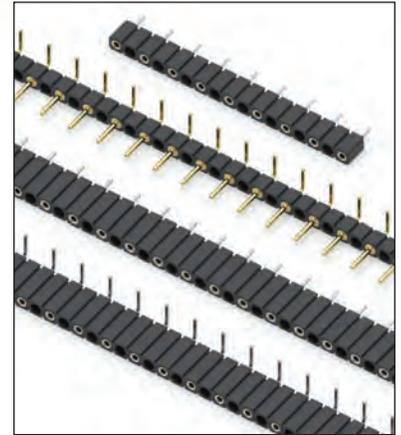
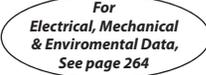


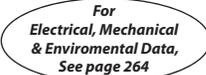
FIG. 4

- Series 800 selectively loaded headers uses MM #5005 pins. See page 215 for details
- Series 801 selectively loaded sockets use MM #1303, #1304 and #1305 pins. See pages 177, 179 & 180 for details
- Series 801 selectively loaded sockets use Hi-Rel, 6-finger BeCu #47 contact rated at 3 amps. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



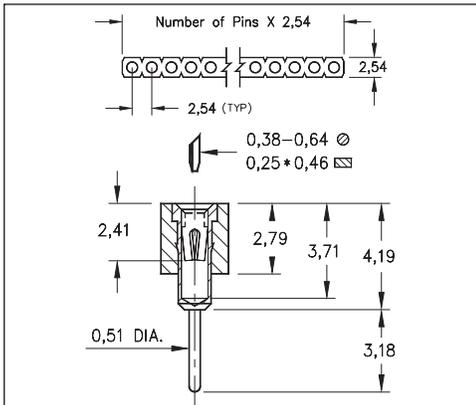
### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 800...20-201</b>	<b>Right Angle Header</b>
	800-10-0_ -20-201000	Specify number of pins $\uparrow$ 02-32
  		
SPECIFY PLATING CODE XX=		
Pin Plating  0,25µm Au		

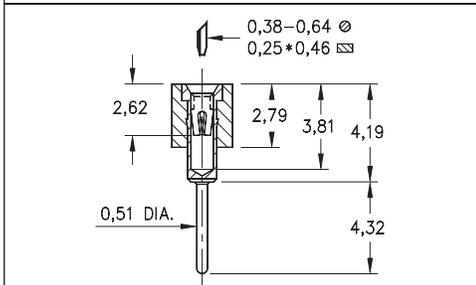
<b>FIG. 2</b>	<b>Series 801...20-201</b>	<b>Right Angle Socket</b>
	801-XX-0_ -20-201000	Specify number of pins $\uparrow$ 02-25
<b>FIG. 3</b>	<b>Series 801...10-212</b>	<b>Straight Socket</b>
	801-43-0_ -10-212000	Specify number of pins $\uparrow$ 02-18
<b>FIG. 4</b>	<b>Series 801...10-201</b>	<b>Straight Socket</b>
	801-43-0_ -10-201000	Specify number of pins $\uparrow$ 02-25
  		
SPECIFY PLATING CODE XX=		
Sleeve (Pin)  41  43 		
Contact (Clip)  5,08µm Sn 5,08µm Sn		
0,25µm Au 0,76µm Au		

# INTERCONNECTS

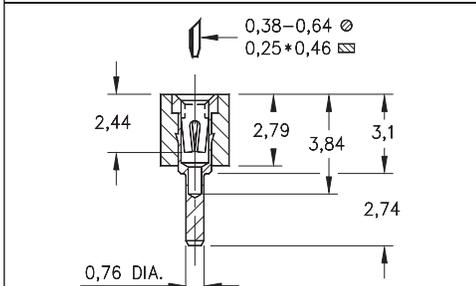
## SERIES 310, 311, 315 • 2,54 GRID SOLDER TAIL • SINGLE ROW STRIPS



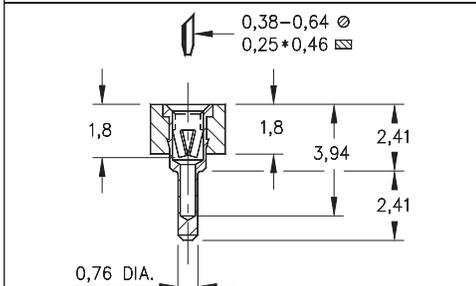
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- SIP sockets accept 0,38 - 0,64 diameter pins and standard IC leads
- Various solder tails available: standard length, long for multi-layer boards, very low and ultra low profile. See Mill-Max #1001, #0134, #0501 or #1534 pins. See pages 161, 162 and 165 for details
- Hi-Rel, 4-finger BeCu #12 and #30 contact are rated at 3 amps. See pages 252 and 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 310...001	Standard Solder Tail
<b>FIG. 1</b>	310-XX-1	-41-001000 Specify number of pins → 01-64
<b>FIG. 2</b>	Series 311...001	Long Solder Tail
	311-XX-1	-41-001000 Specify number of pins → 01-64
<b>FIG. 3</b>	Series 315...001	Very Low Profile
	315-XX-1	-41-001000 Specify number of pins → 01-64
<b>FIG. 4</b>	Series 315...003	Ultra Low Profile
	315-XX-1	-41-003000 Specify number of pins → 01-64



XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

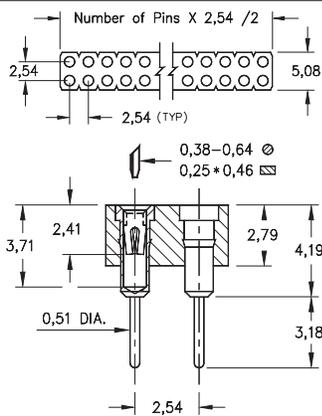
SPECIFY PLATING CODE XX=	11	13	91	93	99	41	43	44	47
Sleeve (Pin)	0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn	Au Flash

★ 41 & 91 Platings Non-Standard

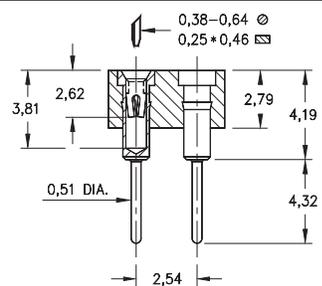


# INTERCONNECTS

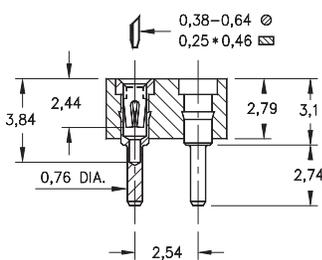
## SERIES 410, 411, 415 • 2,54 GRID SOLDER TAIL • DOUBLE ROW STRIPS



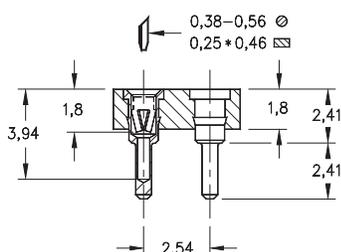
**FIG. 1**



**FIG. 2**

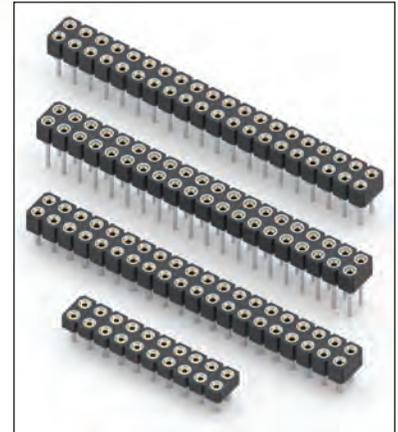


**FIG. 3**



**FIG. 4**

- Series 41X double row strip sockets are on 2,54 grid
- Various solder tails available: standard length, long for multi-layer boards, very low and ultra low profile. See Mill-Max #1001, #0134, #0501 or #1534 pins. See pages 161, 162 and 165 for details
- Hi-Rel, 4-finger BeCu #12 and #30 contact are rated at 3 amps. See pages 252 and 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

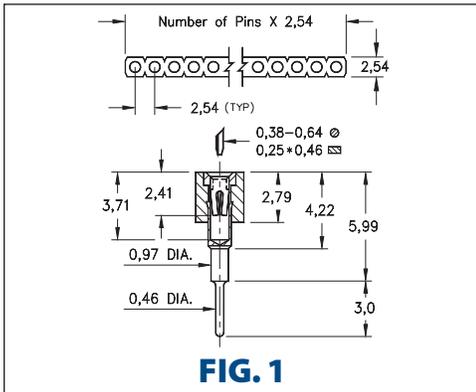


### ORDERING INFORMATION

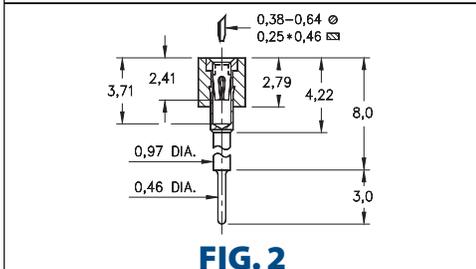
	Series 410...001	Standard Solder Tail					
<b>FIG. 1</b>	410-XX-2	-41-001000 Specify number of pins 04-64					
<b>FIG. 2</b>	Series 411...001	Long Solder Tail					
	411-XX-2	-41-001000 Specify number of pins 04-64					
<b>FIG. 3</b>	Series 415...001	Very Low Profile					
	415-XX-2	-41-001000 Specify number of pins 04-64					
<b>FIG. 4</b>	Series 415...003	Ultra Low Profile					
	415-XX-2	-41-003000 Specify number of pins 04-64					
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>							
<b>SPECIFY PLATING CODE XX=</b>							
	11	13	91	93	41	43	
Sleeve (Pin)	0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	

# INTERCONNECTS

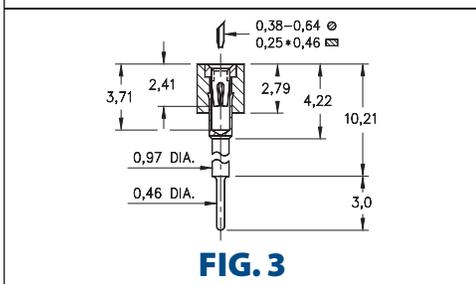
## SERIES 316 • 2,54 GRID ELEVATED • SINGLE ROW STRIPS



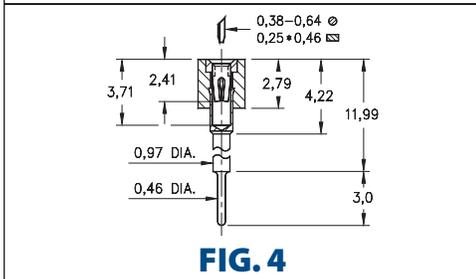
**FIG. 1**



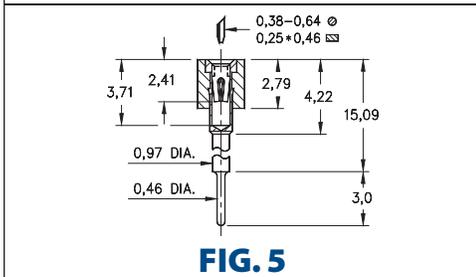
**FIG. 2**



**FIG. 3**



**FIG. 4**



**FIG. 5**

- Elevated socket strips are available in 5 different heights:

316...006 uses pin # 0153-1  
 316...003 uses pin # 0153-2  
 316...007 uses pin # 0153-3  
 316...008 uses pin # 0153-4  
 316...001 uses pin # 0153-5  
 See page 167 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

FIG. 1	Series 316...006	Standoff Height = 5,99
	Specify number of pins	316-XX-1
FIG. 2	Series 316...003	Standoff Height = 8,0
	Specify number of pins	316-XX-1
FIG. 3	Series 316...007	Standoff Height = 10,21
	Specify number of pins	316-XX-1
FIG. 4	Series 316...008	Standoff Height = 11,99
	Specify number of pins	316-XX-1
FIG. 5	Series 316...001	Standoff Height = 15,09
	Specify number of pins	316-XX-1



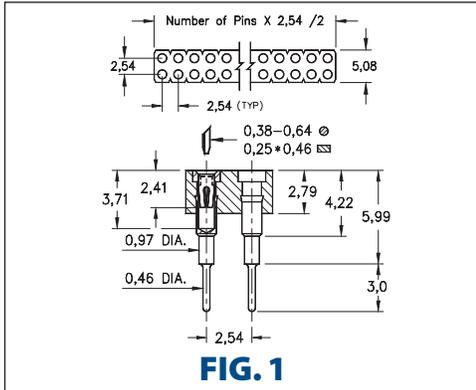
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

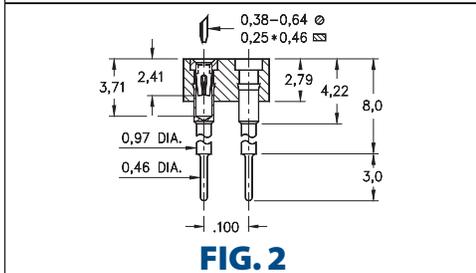
SPECIFY PLATING CODE XX=	91	93	41	43	47
Sleeve (Pin)	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash

# INTERCONNECTS

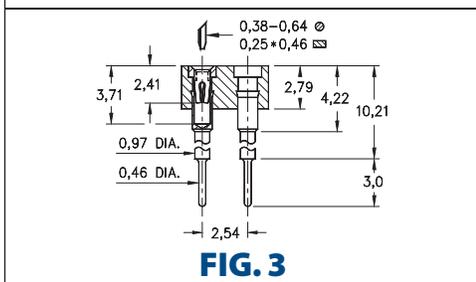
## SERIES 416 • 2,54 GRID ELEVATED • DOUBLE ROW STRIPS



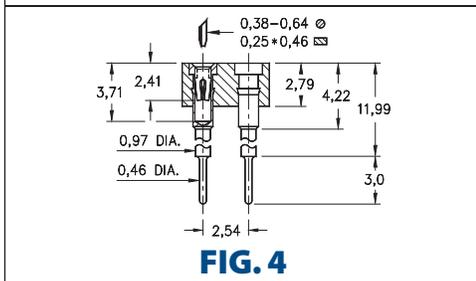
**FIG. 1**



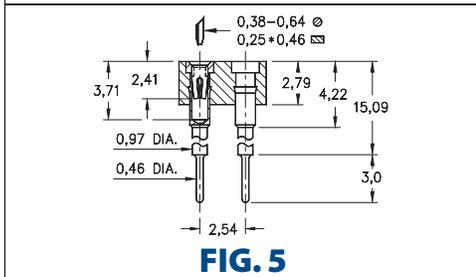
**FIG. 2**



**FIG. 3**



**FIG. 4**



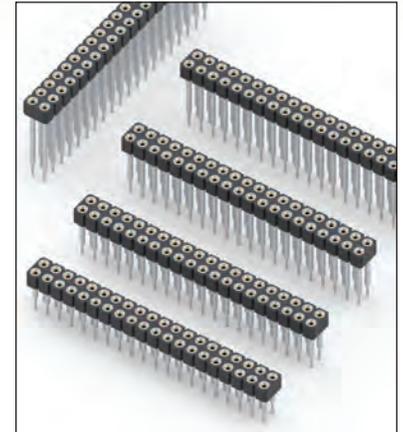
**FIG. 5**

- Elevated socket strips are available in 5 different heights:

- 416...006 uses pin # 0153-1
  - 416...003 uses pin # 0153-2
  - 416...007 uses pin # 0153-3
  - 416...008 uses pin # 0153-4
  - 416...001 uses pin # 0153-5
- See page 167 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 416...006	Standoff Height = 5,99
<b>FIG. 1</b>	416-XX-2	-41-006000
	Specify number of pins	04-64
		↑
	Series 416...003	Standoff Height = 8,0
<b>FIG. 2</b>	416-XX-2	-41-003000
	Specify number of pins	04-64
		↑
	Series 416...007	Standoff Height = 10,21
<b>FIG. 3</b>	416-XX-2	-41-007000
	Specify number of pins	04-64
		↑
	Series 416...008	Standoff Height = 11,99
<b>FIG. 4</b>	416-XX-2	-41-008000
	Specify number of pins	04-64
		↑
	Series 416...001	Standoff Height = 15,09
<b>FIG. 5</b>	416-XX-2	-41-001000
	Specify number of pins	04-64
		↑



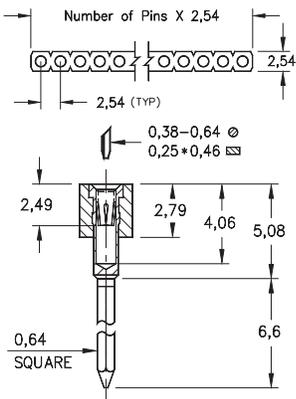
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

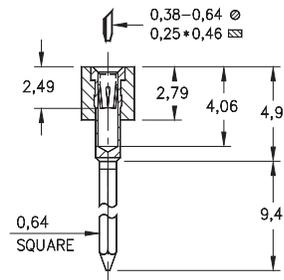
SPECIFY PLATING CODE XX=	91	93	41	43
Sleeve (Pin) 	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip) 	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

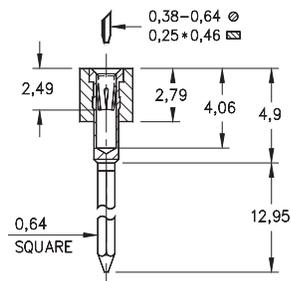
## SERIES 321, 322, 323, 324 • 2,54 GRID WRAPOST • SINGLE ROW STRIPS



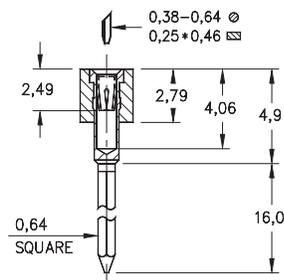
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

• Wraposts available in 1 - 4 levels using MM pin numbers:

- 1-Level uses pin # 0040-1
  - 2-Level uses pin # 0089-2
  - 3-Level uses pin # 0088-3
  - 4-Level uses pin # 0086-4
- See page 198 for details

• Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

• Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 321...001	1 Level Wrapost
<b>FIG. 1</b>	321-13-1	-41-001000 Specify number of pins 01-64
	Series 322...001	2 Level Wrapost
<b>FIG. 2</b>	322-XX-1	-41-001000 Specify number of pins 01-64
	Series 323...001	3 Level Wrapost
<b>FIG. 3</b>	323-XX-1	-41-001000 Specify number of pins 01-64
	Series 324...002	4 Level Wrapost
<b>FIG. 4</b>	324-XX-1	-41-002000 Specify number of pins 01-64



XX=Plating Code  
See Below

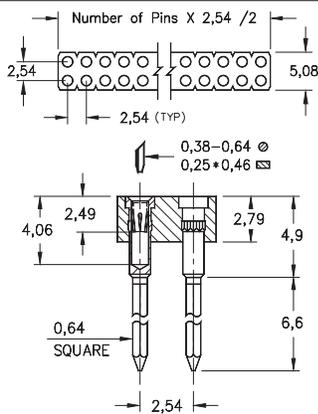
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	11	13	91	93	41	43
Sleeve (Pin)	0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

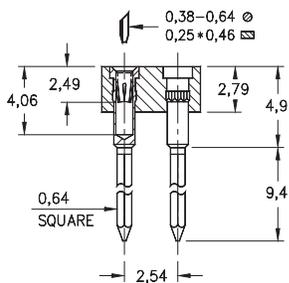


# INTERCONNECTS

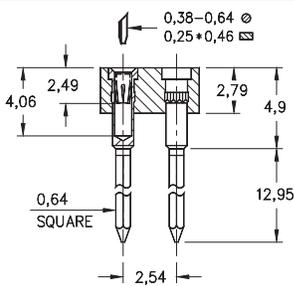
## SERIES 421, 422, 423, 424 • 2,54 GRID WRAPOST • DOUBLE ROW STRIPS



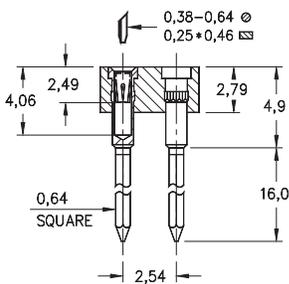
**FIG. 1**



**FIG. 2**



**FIG. 3**



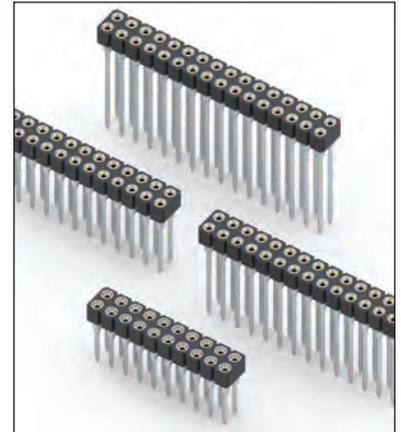
**FIG. 4**

- Wrapost double row strip sockets are available with 1 - 4 level wraposts:

- 1-Level uses pin # 0040-1
  - 2-Level uses pin # 0089-2
  - 3-Level uses pin # 0088-3
  - 4-Level uses pin # 0086-4
- See page 198 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations

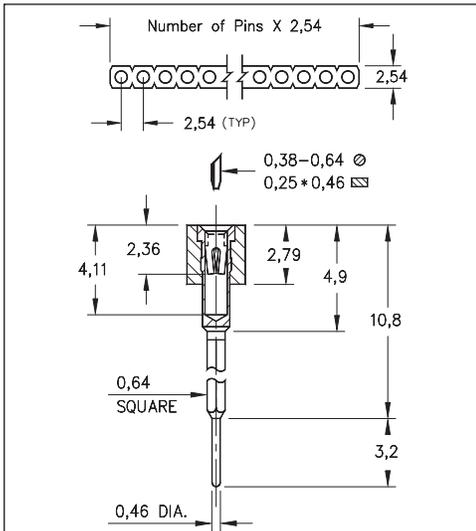


### ORDERING INFORMATION

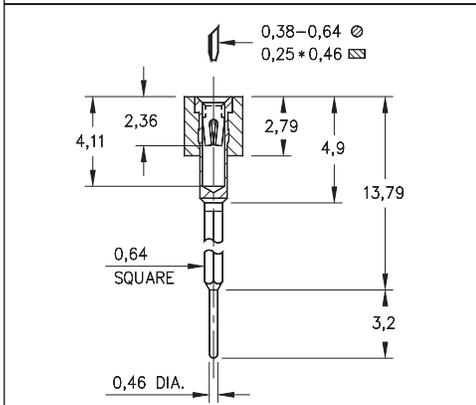
	Series 421...001	1 Level Wrapost			
<b>FIG. 1</b>	421-XX-2	-41-001000			
	Specify number of pins	04-64			
	Series 422...001	2 Level Wrapost			
<b>FIG. 2</b>	422-XX-2	-41-001000			
	Specify number of pins	04-64			
	Series 423...001	3 Level Wrapost			
<b>FIG. 3</b>	423-XX-2	-41-001000			
	Specify number of pins	04-64			
	Series 424...002	4 Level Wrapost			
<b>FIG. 4</b>	424-XX-2	-41-002000			
	Specify number of pins	04-64			
  					
<b>SPECIFY PLATING CODE XX=</b>	13 	93			43 
Sleeve (Pin) 	0,25µm Au	508µm Sn/Pb			5,08µm Sn
Contact (Clip) 	0,76µm Au	0,76µm Au			0,76µm Au

# INTERCONNECTS

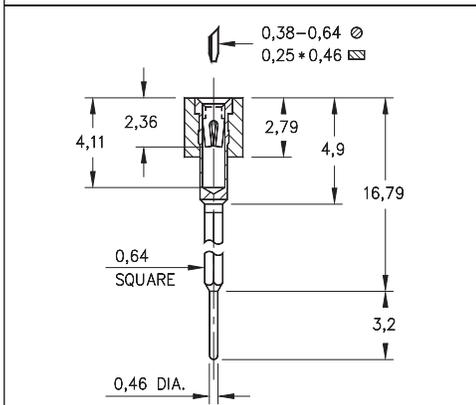
## SERIES 326 • 2,54 GRID WRAPOST WITH SOLDER TAIL • SINGLE ROW STRIPS



**FIG. 1**



**FIG. 2**



**FIG. 3**

- Wrapost / Solder Tail combinations are available in 3 lengths using MM pin numbers:

326...001 uses pin # 2601

326...002 uses pin # 2602

326...003 uses pin # 2603

See page 199 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 326...001	1 Level Wrapost
<b>FIG. 1</b>	326-XX-1	-41-001000
	Specify number of pins	01-64
	Series 326...002	2 Level Wrapost
<b>FIG. 2</b>	326-XX-1	-41-002000
	Specify number of pins	01-64
	Series 326...003	3 Level Wrapost
<b>FIG. 3</b>	326-XX-1	-41-003000
	Specify number of pins	01-64



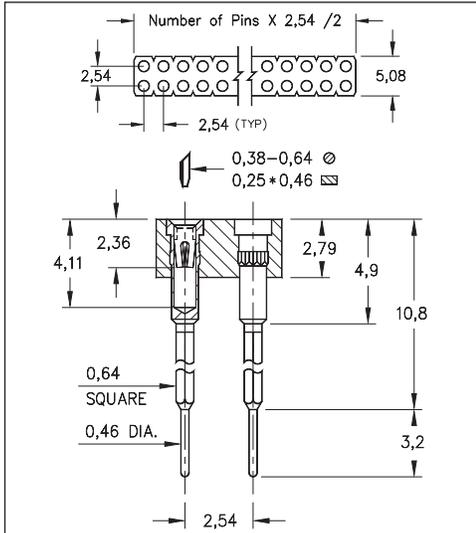
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

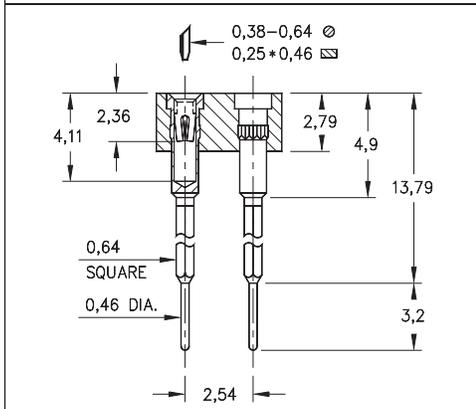
SPECIFY PLATING CODE XX=	91	93	41	43
Sleeve (Pin) 	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip) 	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

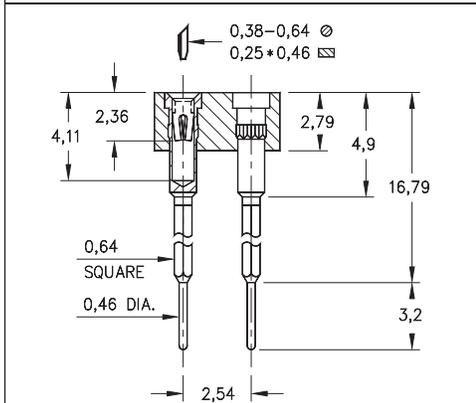
## SERIES 426 • 2,54 GRID WRAPPOST WITH SOLDER TAIL • DOUBLE ROW STRIPS



**FIG. 1**



**FIG. 2**



**FIG. 3**

- Wrapost / Solder Tail combination for interconnect purposes are available in 3 lengths using pin numbers:

426...001 uses pin # 2601

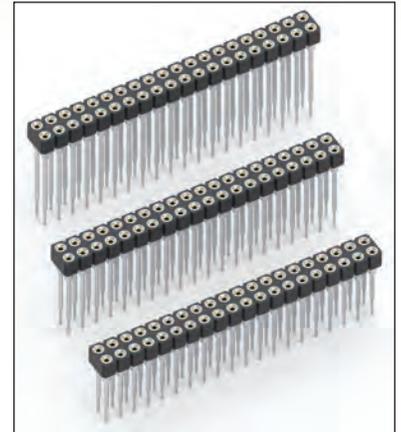
426...002 uses pin # 2602

426...003 uses pin # 2603

See page 199 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 426...001	1 Level Wrappost
<b>FIG. 1</b>	426-XX-2	-41-001000
	Specify number of pins	04-64
	Series 426...002	2 Level Wrappost
<b>FIG. 2</b>	426-XX-2	-41-002000
	Specify number of pins	04-64
	Series 426...003	3 Level Wrappost
<b>FIG. 3</b>	426-XX-2	-41-003000
	Specify number of pins	04-64



XX=Plating Code  
See Below

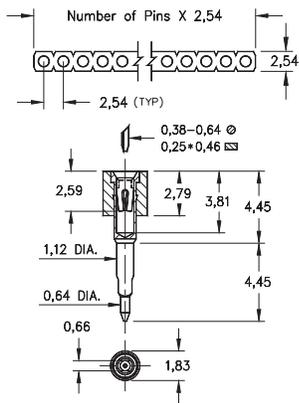
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	13	93	43
Sleeve (Pin)	0,25µm Au	508µm Sn/Pb	5,08µm Sn
Contact (Clip)	0,76µm Au	0,76µm Au	0,76µm Au

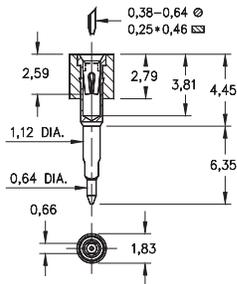


# INTERCONNECTS

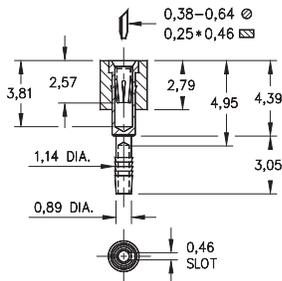
## SERIES 304, 346 • 2,54 GRID SOLDERLESS PRESS-FIT • SINGLE ROW STRIPS



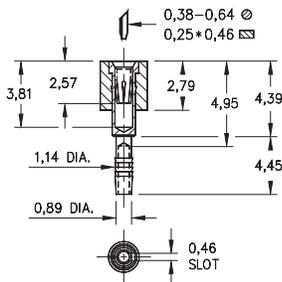
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- Unique compliant tail pins conform to the plated through-hole without stressing the inner layers of a multilayer board
- Recommended plated through-hole for 304 series: 0,91 - 1,04 use a 1,1mm drill prior to plating. Using MM #0477 & #0478 pins. See page 162 for details
- For 346 series: 1,02 ± 0,07 finished plated through-hole. Using MM #4612 & #4613 pins. See page 162 for details. Patent No. 4,799,904
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic



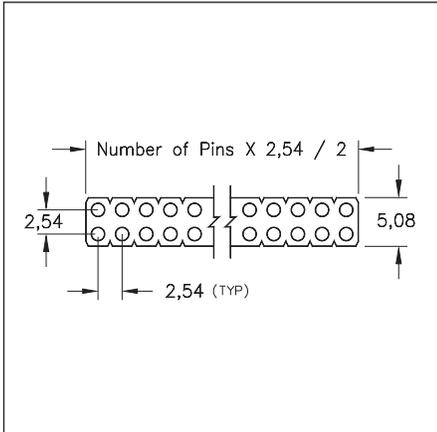
### ORDERING INFORMATION

FIG. 1	Series 304...770	Solderless Press-Fit						
		For 1,57 Thick Boards						
	304-XX-1__-41-770000							
	Specify number of pins	01-64						
FIG. 2	Series 304...780	Solderless Press-Fit						
	For 3,18 Thick Boards							
	304-XX-1__-41-780000							
	Specify number of pins	01-64						
Mill-Max recommends plating Code 13 for Series 304...770 and 304...780								
FIG. 3	Series 346...012	Compliant Solderless Press-Fit						
	For 1,52 - 2,54 Thick Boards							
	346-XX-1__-41-012000							
	Specify number of pins	01-64						
FIG. 4	Series 346...013	Compliant Solderless Press-Fit						
	For 2,29 - 3,3 Thick Boards							
	346-XX-1__-41-013000							
	Specify number of pins	01-64						
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>								
SPECIFY PLATING CODE XX=								
	11	13	91	93	99	41	43	44
Sleeve (Pin)	0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn

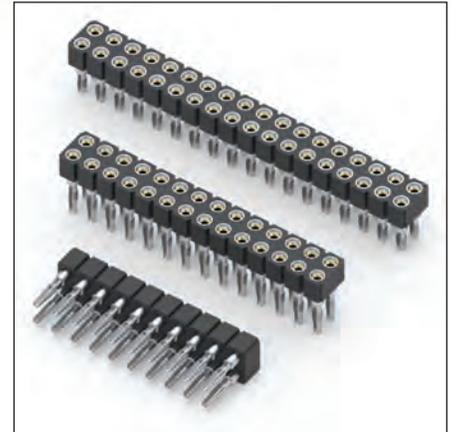


# INTERCONNECTS

## SERIES 446 • 2,54 GRID COMPLIANT TAIL • DOUBLE ROW STRIPS



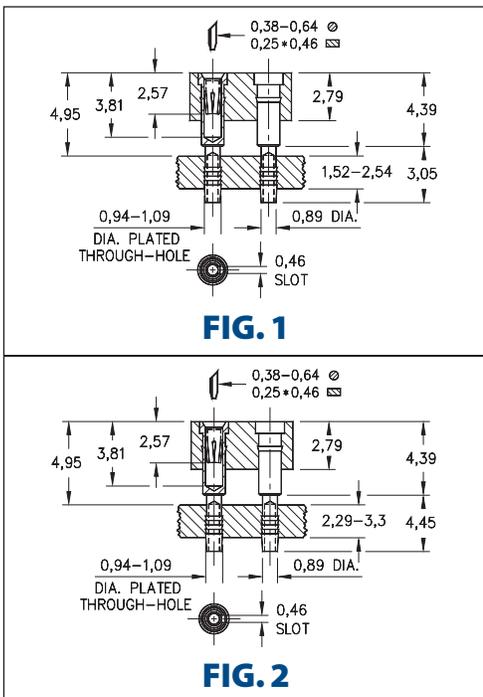
- Compliant tail solderless press-fit: MM #4612 or #4613 pins. Use series 446...012 for 1,52 - 3,05 thick boards and series 446...013 for 2,29 - 3,30 thick boards. See page 162 for details
- Compliant tail receptacles can be inserted and removed without any degradation of the plated through-hole
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic



### APPLICATION OF COMPLIANT TAIL PINS

Mill-Max's patented\* compliant tail features precision-machined pins that are hollow and slotted to conform to a  $1,02 \pm 0,08$  diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration at left). The pin's tail has fine serrations that form a perfect "gas tight" connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.

\*Patent No. 4,799,904.



### ORDERING INFORMATION

FIG. 1	Series 446...012	Compliant Tail Socket
		446-XX-2
	Specify number of pins	04-64
FIG. 2	Series 446...013	Compliant Tail Socket
		446-XX-2
	Specify number of pins	04-64



XX=Plating Code  
See Below

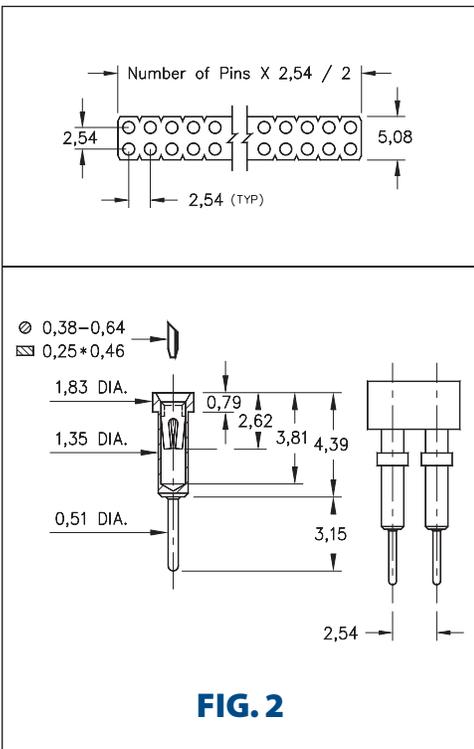
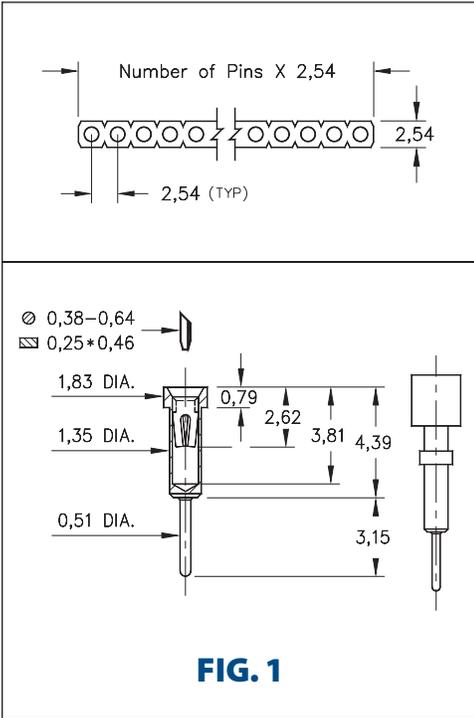
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	13	93	99	43	44
Sleeve (Pin)	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,76µm Au	0,76µm Au	2,54µm Sn/Pb	0,76µm Au	2,54µm Sn



# INTERCONNECTS

## SERIES 712 • 2,54 GRID CARRIER WITH SOLDER TAIL • SINGLE AND DOUBLE ROW STRIPS



- Standard solder tail receptacles can be mounted as a low profile receptacle or by the solder tail for use in smaller diameter holes
- Series 712 use MM #0255 pins. See page 165 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Single Row (0,71 or 1,4 min. mounting holes)</b>
	712-XX-1__-41-001000 Specify number of pins    01-64
<b>FIG. 2</b>	<b>Double Row (0,71 or 1,4 min. mounting holes)</b>
	712-XX-2__-41-001000 Specify number of pins    04-64



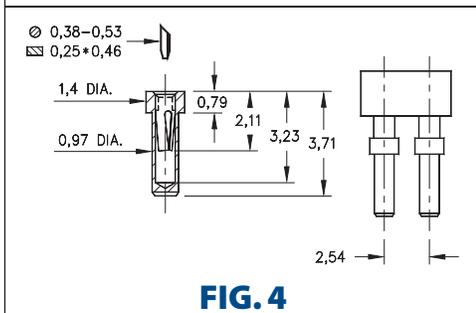
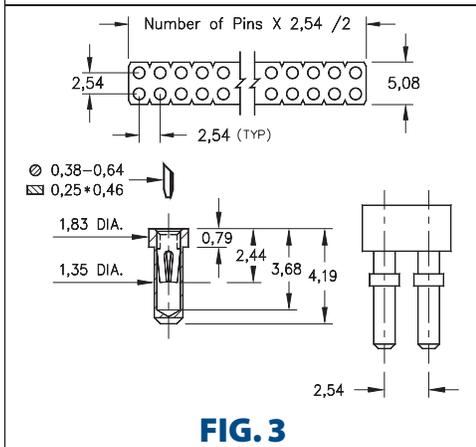
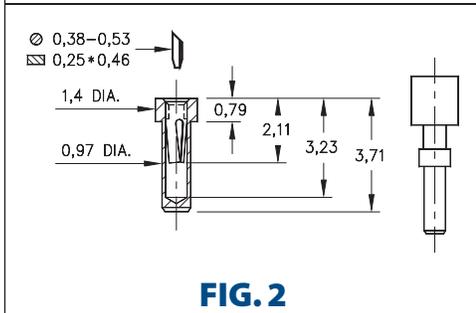
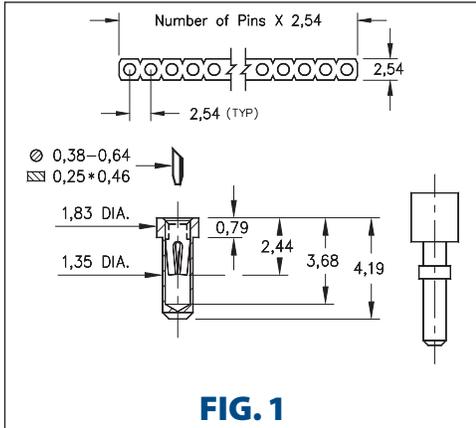
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	11	13	91	93	41	43	
Sleeve (Pin)	0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	

# INTERCONNECTS

## SERIES 714...00X • 2,54 GRID LOW PROFILE CARRIERS • SINGLE AND DOUBLE ROW STRIPS



- Low profile receptacles sit 0,79 above the board
- Series 714 use MM #1401 and MM #1407 pin receptacles. See pages 157 and 170 for details
- Hi-Rel, 4-finger BeCu #30 contact is used in the #1401 receptacle and a BeCu #11 contact is used in the #1407. Both contacts are rated at 3 amps. See pages 251 and 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

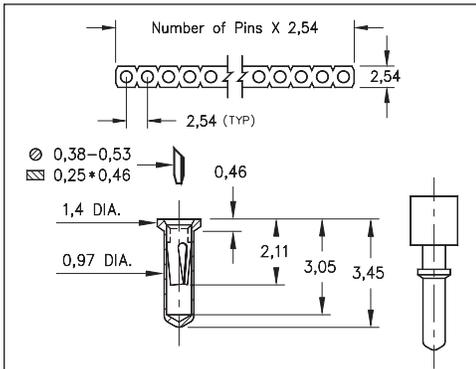


### ORDERING INFORMATION

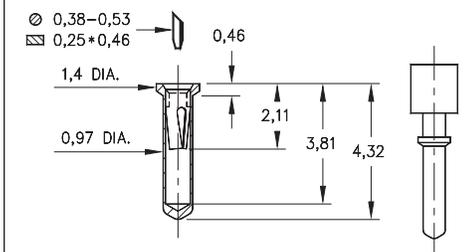
FIG. 1	Single Row (1,4 min. mounting hole)				
	714-XX-1--41-001000				
Specify number of pins				01-64	
FIG. 2	Single Row (0,99 min. mounting hole)				
	714-XX-1--31-007000				
Specify number of pins				01-64	
FIG. 3	Double Row (1,4 min. mounting hole)				
	714-XX-2--41-001000				
Specify number of pins				04-64	
FIG. 4	Double Row (0,99 min. mounting hole)				
	714-XX-2--31-007000				
Specify number of pins				04-64	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>					
<b>SPECIFY PLATING CODE XX=</b>					
		91	93	41	43
Sleeve (Pin)		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

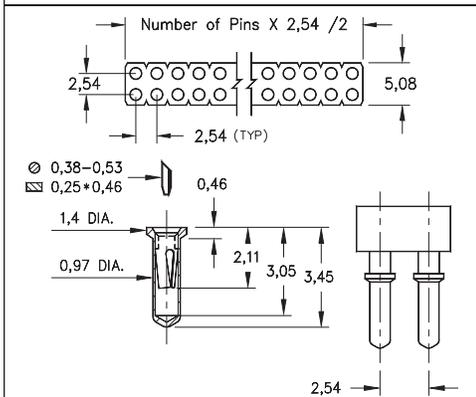
## SERIES 714...01X • 2,54 GRID ULTRA LOW PROFILE CARRIERS • SINGLE AND DOUBLE ROW STRIPS



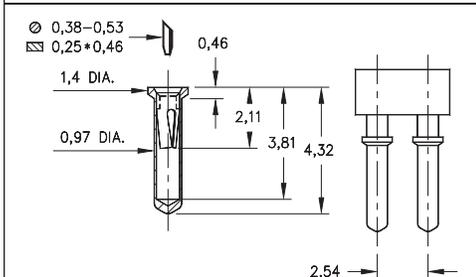
**FIG. 1**



**FIG. 2**

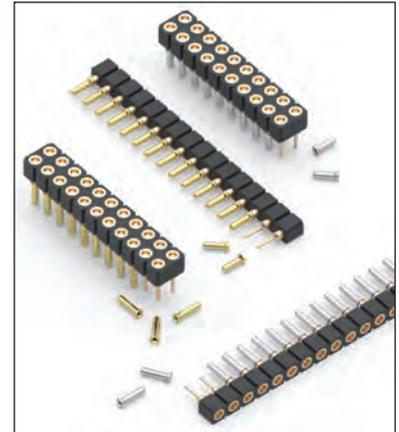


**FIG. 3**



**FIG. 4**

- Ultra low profile receptacles sit 0,46 above the board
- Series 714 use MM #0552-1 and MM #0552-2 pin receptacles. See page 158 for details
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

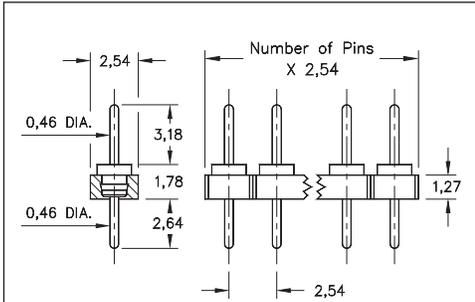


### ORDERING INFORMATION

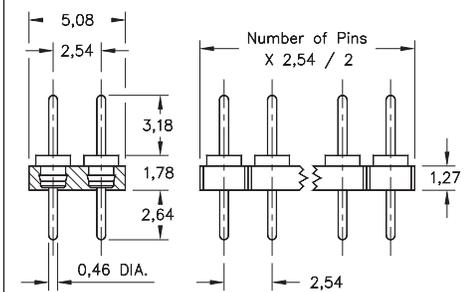
	Single Row (0,99 min. mounting hole)				
<b>FIG. 1</b>	714-XX-1__-31-012000				
	Specify number of pins				01-64
<b>FIG. 2</b>	714-XX-1__-31-018000				
	Specify number of pins				01-64
<b>FIG. 3</b>	Double Row (0,99 min. mounting hole)				
	714-XX-2__-31-012000				
<b>FIG. 4</b>	Double Row (0,99 min. mounting hole)				
	714-XX-2__-31-018000				
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>					
<b>SPECIFY PLATING CODE XX=</b>		91	93	41	43
Sleeve (Pin)		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

# INTERCONNECTS

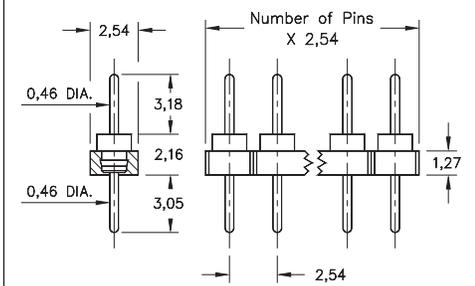
## SERIES 335, 364, 435, 464 • 2,54 GRID (0,46 DIA. PINS), LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS



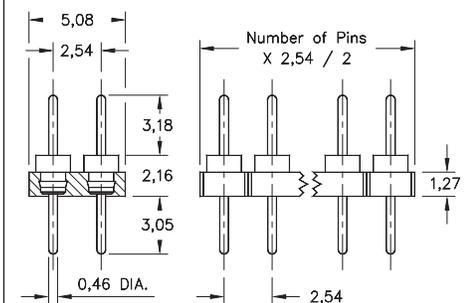
**FIG. 1**



**FIG. 2**

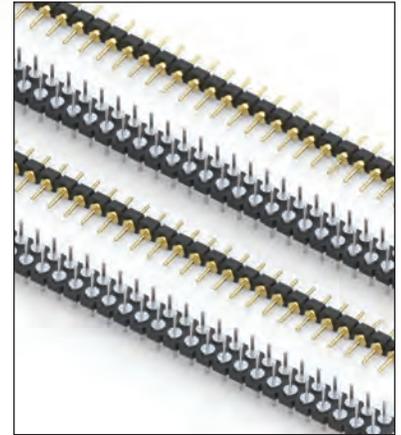


**FIG. 3**



**FIG. 4**

- Series 335 and 435 single and double row PCB interconnects offer a 1,78 profile, the lowest available
- Series 364 and 464 single and double row PCB interconnects offer 2,16 profile above board
- Series 335 and 435 use MM #3516 pins. See page 212 for details
- Series 364 and 464 use MM #6458 pins. See page 213 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

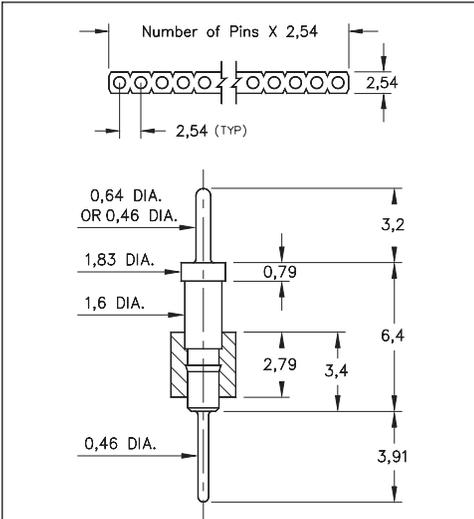


### ORDERING INFORMATION

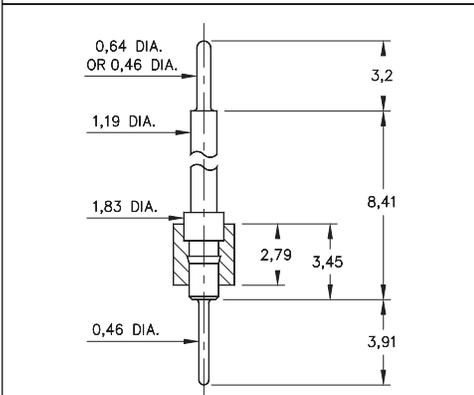
<b>FIG. 1</b>	<b>Series 335...160</b> <b>Single Row 1,78 Profile Pin Header</b>
	335-XX-1__-00-160000 Specify number of pins      01-32
<b>FIG. 2</b>	<b>Series 435...160</b> <b>Double Row 1,78 Profile Pin Header</b>
	435-XX-2__-00-160000 Specify number of pins      04-72
<b>FIG. 3</b>	<b>Series 364...580</b> <b>Single Row 2,16 Profile Pin Header</b>
	364-10-1__-00-580000 Specify number of pins      01-32
<b>FIG. 4</b>	<b>Series 464...580</b> <b>Double Row 2,16 Profile Pin Header</b>
	464-10-2__-00-580000 Specify number of pins      04-72
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #c8e6c9;">RoHS - 2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">For Electrical, Mechanical &amp; Environmental Data, See page 264</div> </div>	
<b>SPECIFY PLATING CODE XX=</b>	10 <span style="color: green;">◆</span> 90      40 <span style="color: green;">◆</span>
Pin Plating	0,25µm Au      5,08µm Sn/Pb      5,08µm Sn

# INTERCONNECTS

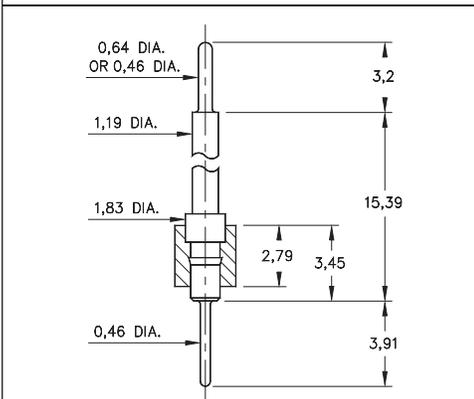
## SERIES 351 • 2,54 GRID INTERCONNECT HEADERS • SINGLE ROW STRIPS



**FIG. 1**



**FIG. 2**



**FIG. 3**

- Series 351 interconnect header strips come in three lengths with 0,46 dia. pluggable solder tails at one end and 0,64 dia. pins at the other. Please see series:  
351...003 uses pin #5503  
351...004 uses pin #5504  
351...005 uses pin #5505
- 0,46 pluggable solder tails are available at both ends. Please see series:  
351...009 uses pin #5509  
351...010 uses pin #5510  
351...011 uses pin #5511  
See pages 212 and 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 351...003</b>	<b>0,46 / 0,64 Dia. Solder Tails</b>
	351-10-1_ -00-003000	Specify number of pins ↑ 01-64
<b>FIG. 2</b>	<b>Series 351...009</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	351-10-1_ -00-009000	Specify number of pins ↑ 01-64
<b>FIG. 2</b>	<b>Series 351...004</b>	<b>0,46 / 0,64 Dia. Solder Tails</b>
	351-10-1_ -00-004000	Specify number of pins ↑ 01-64
<b>FIG. 3</b>	<b>Series 351...010</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	351-10-1_ -00-010000	Specify number of pins ↑ 01-64
<b>FIG. 3</b>	<b>Series 351...005</b>	<b>0,46 / 0,64 Dia. Solder Tails</b>
	351-10-1_ -00-005000	Specify number of pins ↑ 01-64
<b>FIG. 3</b>	<b>Series 351...011</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	351-10-1_ -00-011000	Specify number of pins ↑ 01-64



XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating 	0,25µm Au			

# INTERCONNECTS

## SERIES 451 • 2,54 GRID INTERCONNECT HEADERS • DOUBLE ROW STRIPS

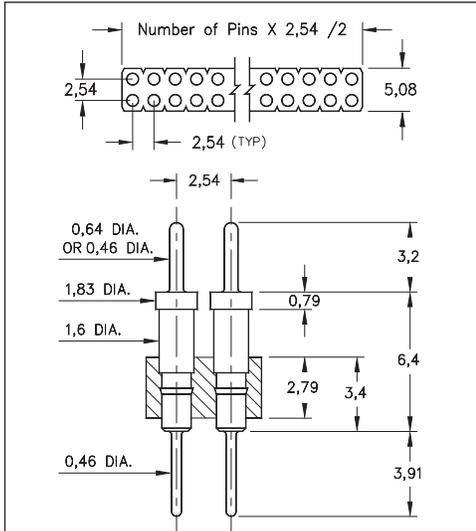


FIG. 1

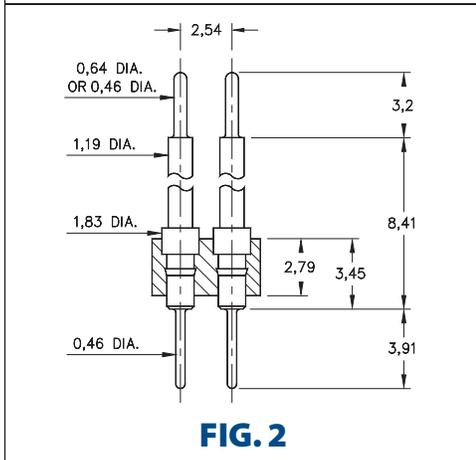


FIG. 2

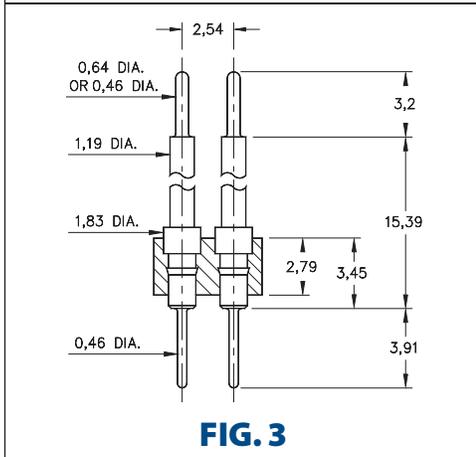


FIG. 3

- Series 451 interconnect header strips come in three lengths with 0,46 dia. pluggable solder tails at one end and 0,64 dia. pins at the other. Please see series:  
451...003 uses pin #5503  
451...004 uses pin #5504  
451...005 uses pin #5505
- 0,46 pluggable solder tails are available at both ends. Please see series:  
451...009 uses pin #5509  
451...010 uses pin #5510  
451...011 uses pin #5511  
See pages 212 and 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

FIG. 1	<b>Series 451...003</b>	<b>0,46 / 0,64 Dia. Solder Tails</b>
	451-10-2-__-00-003000	Specify number of pins $\uparrow$ 04-64
FIG. 2	<b>Series 451...009</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	451-10-2-__-00-009000	Specify number of pins $\uparrow$ 04-64
FIG. 2	<b>Series 451...004</b>	<b>0,46 / 0,64 Dia. Solder Tails</b>
	451-10-2-__-00-004000	Specify number of pins $\uparrow$ 04-64
FIG. 3	<b>Series 451...010</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	451-10-2-__-00-010000	Specify number of pins $\uparrow$ 04-64
FIG. 3	<b>Series 451...005</b>	<b>0,46 / 0,64 Dia. Solder Tails</b>
	451-10-2-__-00-005000	Specify number of pins $\uparrow$ 04-64
FIG. 3	<b>Series 451...011</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	451-10-2-__-00-011000	Specify number of pins $\uparrow$ 04-64



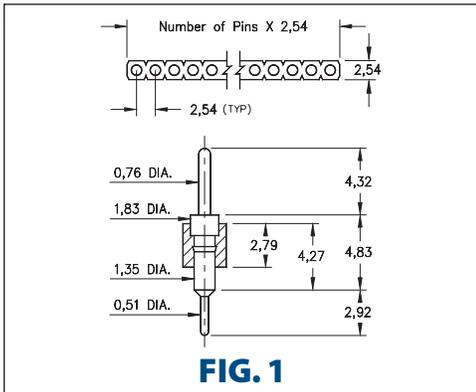
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

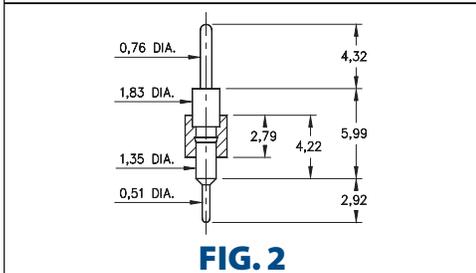
SPECIFY PLATING CODE XX=	10 $\blacklozenge$			
Pin Plating 	0,25 $\mu$ m Au			

# INTERCONNECTS

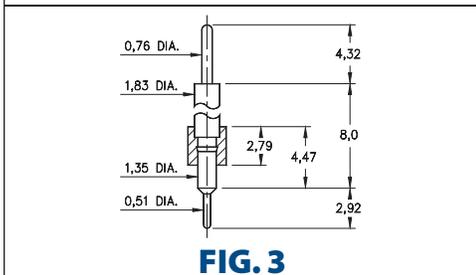
## SERIES 334 • 2,54 GRID INTERCONNECT HEADERS • SINGLE ROW STRIPS



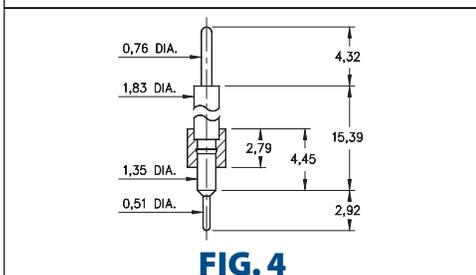
**FIG. 1**



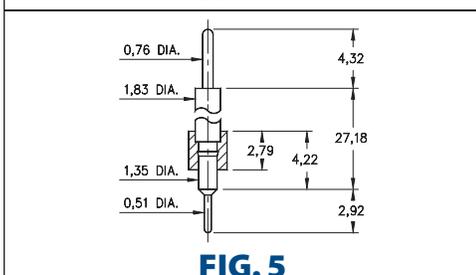
**FIG. 2**



**FIG. 3**



**FIG. 4**



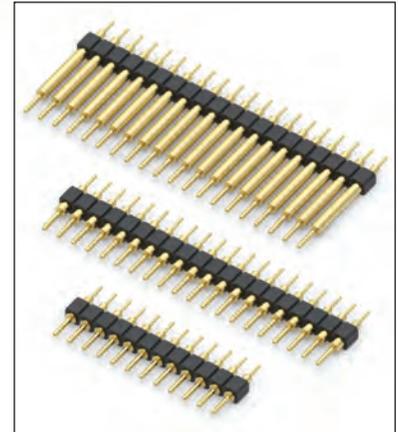
**FIG. 5**

- Series 334 interconnect header strips are available in 5 lengths:

334...020 uses pin #3402 (L = 4,83)  
 334...010 uses pin #3401 (L = 5,99)  
 334...050 uses pin #3405 (L = 8,0)  
 334...000 uses pin #3400 (L = 15,39)  
 334...100 uses pin #3410 (L = 27,18)  
 See page 215 for details

- Strips come with 0,51 pluggable soldertails at one end and 0,76 tails at the other

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 334...020	0,51 / 0,76 Dia. Solder Tails
<b>FIG. 1</b>	334-XX-1	-00-020000
	Specify number of pins	01-64
<b>FIG. 2</b>	334-XX-1	-00-010000
	Specify number of pins	01-64
<b>FIG. 3</b>	334-XX-1	-00-050000
	Specify number of pins	01-64
<b>FIG. 4</b>	334-XX-1	-00-000000
	Specify number of pins	01-64
<b>FIG. 5</b>	334-XX-1	-00-100000
	Specify number of pins	01-64



XX=Plating Code  
See Below

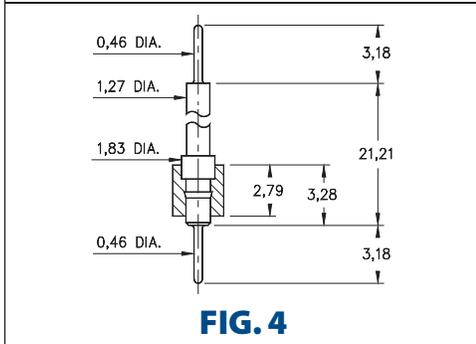
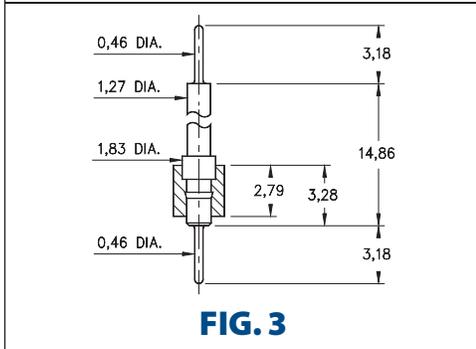
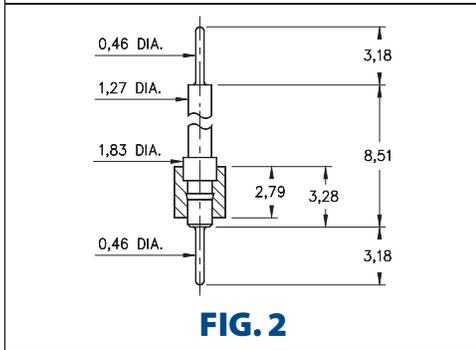
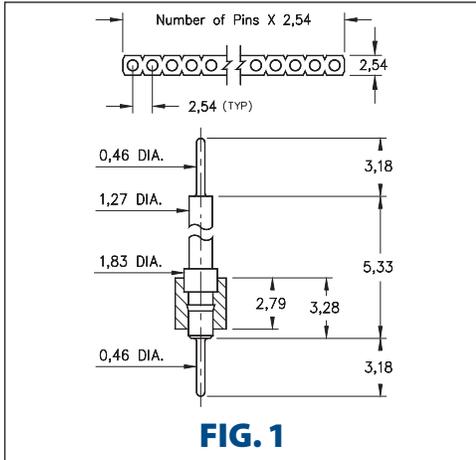
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

SPECIFY PLATING CODE XX=	10	90	40	
Pin Plating	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	



# INTERCONNECTS

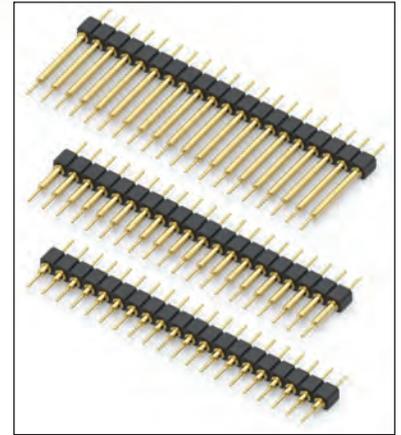
## SERIES 342 • 2,54 GRID BOARD STACKING HEADERS • SINGLE ROW STRIPS



- Series 342 interconnect header strips come in four heights with 0,46 dia. pluggable solder tails at both ends

342...591 uses pin #4259-1 (L = 5,33)  
 342...592 uses pin #4259-2 (L = 8,51)  
 342...593 uses pin #4259-3 (L = 14,86)  
 342...594 uses pin #4259-4 (L = 21,21)  
 See page 212 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 342...591	0,46 / 0,46 Dia. Solder Tails
<b>FIG. 1</b>	342-XX-1	-00-591000
	Specify number of pins	01-64
<b>FIG. 2</b>	Series 342...592	0,46 / 0,46 Dia. Solder Tails
	342-XX-1	-00-592000
	Specify number of pins	01-64
<b>FIG. 3</b>	Series 342...593	0,46 / 0,46 Dia. Solder Tails
	342-XX-1	-00-593000
	Specify number of pins	01-64
<b>FIG. 4</b>	Series 342...594	0,46 / 0,46 Dia. Solder Tails
	342-XX-1	-00-594000
	Specify number of pins	01-64



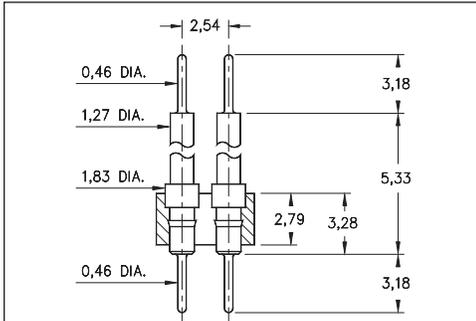
XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

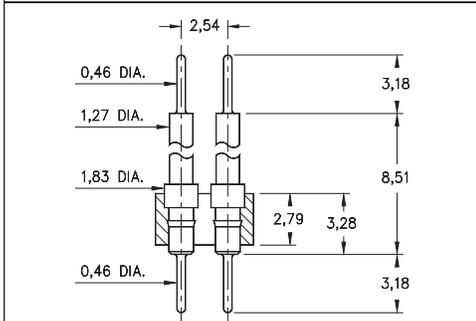
SPECIFY PLATING CODE XX=	10	90	40	
Pin Plating	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	

# INTERCONNECTS

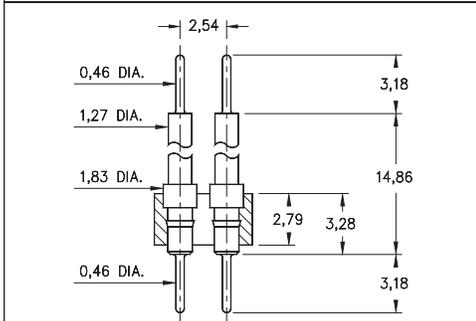
## SERIES 442 • 2,54 GRID BOARD STACKING HEADERS • DOUBLE ROW STRIPS



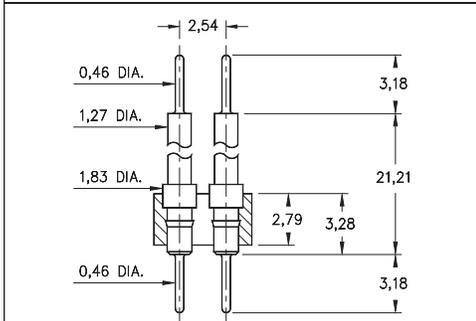
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- Series 442 interconnect header strips come in four heights with 0,46 dia. pluggable solder tails at both ends

442...591 uses pin #4259-1 ( L = 5,33 )  
 442...592 uses pin #4259-2 ( L = 8,51 )  
 442...593 uses pin #4259-3 ( L = 14,86 )  
 442...594 uses pin #4259-4 ( L = 21,21 )  
 See page 212 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 442...591</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	442-XX-2--00-591000	Specify number of pins → 04-64
<b>FIG. 2</b>	<b>Series 442...592</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	442-XX-2--00-592000	Specify number of pins → 04-64
<b>FIG. 3</b>	<b>Series 442...593</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	442-XX-2--00-593000	Specify number of pins → 04-64
<b>FIG. 4</b>	<b>Series 442...594</b>	<b>0,46 / 0,46 Dia. Solder Tails</b>
	442-XX-2--00-594000	Specify number of pins → 04-64



XX=Plating Code  
See Below

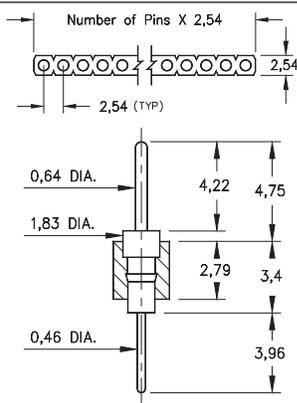
For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

<b>SPECIFY PLATING CODE XX=</b>	10 ◆	90	40 ◆	
Pin Plating 	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	

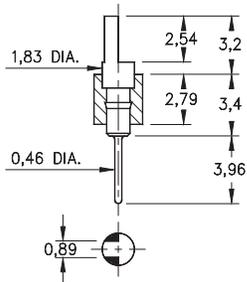


# INTERCONNECTS

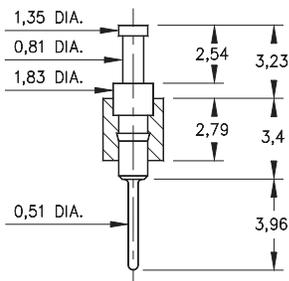
## SERIES 350, 360, 370, 380 • 2,54 GRID SOLDER TAIL • SINGLE ROW STRIPS



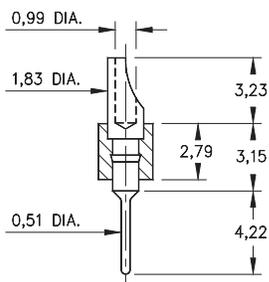
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- Series 350, 360, 370 & 380 single row header strips come in various styles (pin, slotted, head, turret and solder cup) with pluggable solder tails

350...001 uses pin #0290

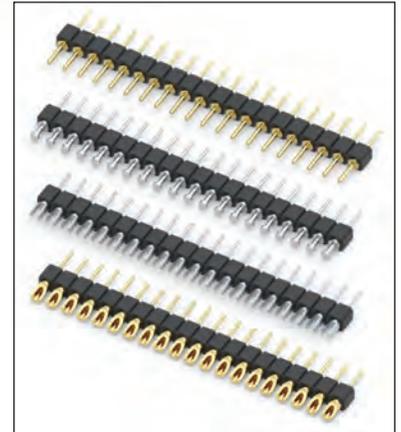
360...001 uses pin #0282

370...001 uses pin #0700

380...001 uses pin #8000

See pages 215 and 216 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations

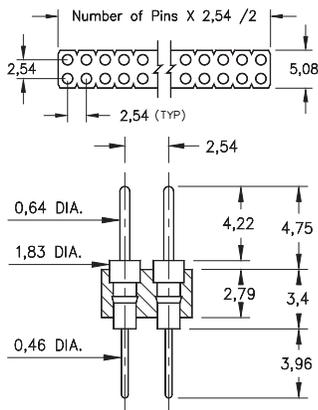


### ORDERING INFORMATION

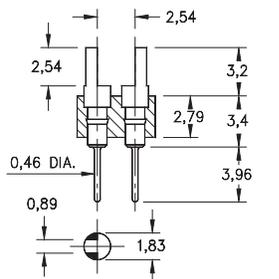
	Series 350...001	0,64 / 0,46 Dia. Solder Tails		
<b>FIG. 1</b>	350-XX-1	-00-001000		
	Specify number of pins	01-64		
<b>FIG. 2</b>	Series 360...001	Slotted Head / Solder Tail		
	360-XX-1	-00-001000		
	Specify number of pins	01-64		
<b>FIG. 3</b>	Series 370...001	Turret / Solder Tail		
	370-XX-1	-00-001000		
	Specify number of pins	01-64		
<b>FIG. 4</b>	Series 380...001	Solder Cup / Solder Tail		
	380-XX-1	-00-001000		
	Specify number of pins	01-64		
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>RoHS - 2</b> 2011/65/EU         </div> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;"> <b>XX=Plating Code</b> See Below         </div> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;">           For Electrical, Mechanical &amp; Environmental Data, See page 264         </div> </div>				
<b>SPECIFY PLATING CODE XX=</b>		10 <span style="color: green;">◆</span>	90	40 <span style="color: green;">◆</span>
Pin Plating		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

# INTERCONNECTS

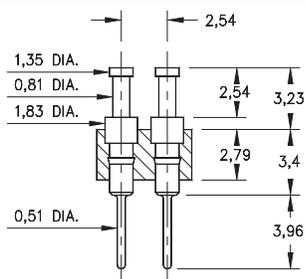
## SERIES 450, 460, 470, 480 • 2,54 GRID SOLDER TAIL • DOUBLE ROW STRIPS



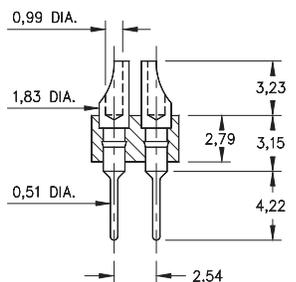
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- Series 450, 460, 470 & 480 double row header strips come in various styles (pin, slotted, head, turret and solder cup) with pluggable solder tails

450...001 uses pin #0290

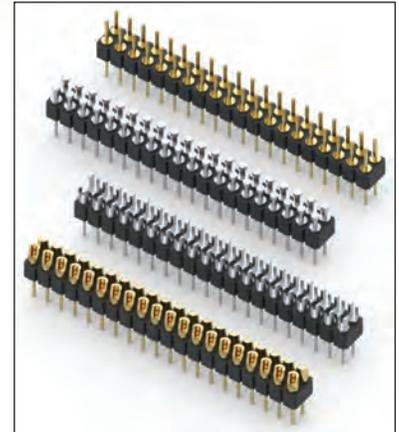
460...001 uses pin #0282

470...001 uses pin #0700

480...001 uses pin #8000

See pages 215 and 216 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Series 450...001</b>	<b>0,64 / 0,46 Dia. Solder Tails</b>
	450-XX-2--00-001000	Specify number of pins $\uparrow$ 04-64
<b>FIG. 2</b>	<b>Series 460...001</b>	<b>Slotted Head / Solder Tail</b>
	460-10-2--00-001000	Specify number of pins $\uparrow$ 02-64
<b>FIG. 3</b>	<b>Series 470...001</b>	<b>Turret / Solder Tail</b>
	470-XX-2--00-001000	Specify number of pins $\uparrow$ 04-64
<b>FIG. 4</b>	<b>Series 480...001</b>	<b>Solder Cup / Solder Tail</b>
	480-10-2--00-001000	Specify number of pins $\uparrow$ 02-64



XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

<b>SPECIFY PLATING CODE XX=</b>	10 $\blacklozenge$	90	40 $\blacklozenge$	
Pin Plating 	0,25 $\mu$ m Au	5,08 $\mu$ m Sn/Pb	5,08 $\mu$ m Sn	



# INTERCONNECTS

## SERIES 353, 362, 363, 373, 382, 383 • 2,54 GRID WRAPOST • SINGLE ROW STRIPS

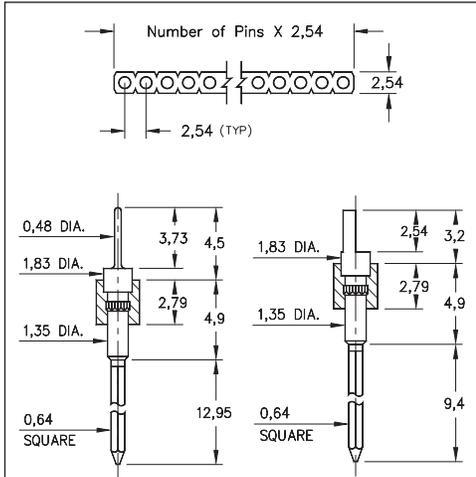


FIG. 1

FIG. 2

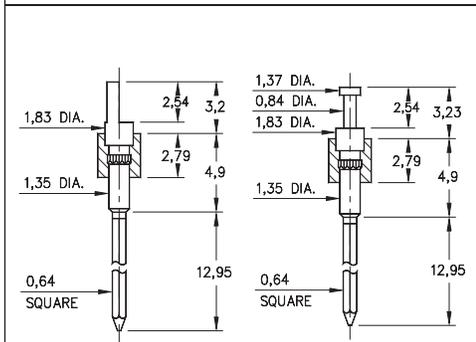


FIG. 3

FIG. 4

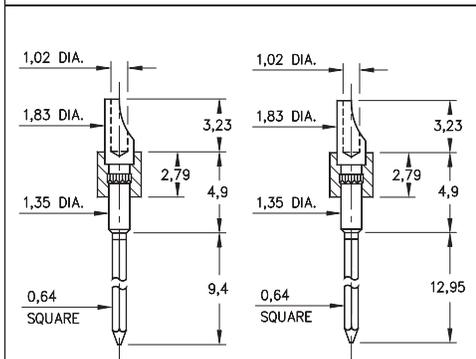


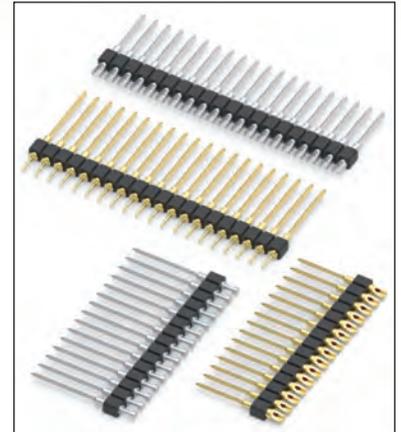
FIG. 5

FIG. 6

- Series 353, 362, 363, 373, 382 and 383 single row header strips come in various styles (pin, slotted head, turret and solder cup) with wrapost tails

- 353...001 uses pin #5301
- 362...001 uses pin #1106-2
- 363...001 uses pin #1106-3
- 373...001 uses pin #0730-3
- 382...001 uses pin #8301-2
- 383...001 uses pin #8301-3

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 353...001	Pin / 3 Level Wrapost
FIG. 1	353-XX-1	-00-001000 Specify number of pins 01-64
FIG. 2	Series 362...001	Slotted Head / 2 Level Wrapost
FIG. 3	362-XX-1	-00-001000 Specify number of pins 01-64
FIG. 4	Series 363...001	Slotted Head / 3 Level Wrapost
FIG. 5	363-XX-1	-00-001000 Specify number of pins 01-64
FIG. 6	Series 373...001	Turret / 3 Level Wrapost
FIG. 7	373-XX-1	-00-001000 Specify number of pins 01-64
FIG. 8	Series 382...001	Solder Cup / 2 Level Wrapost
FIG. 9	382-XX-1	-00-001000 Specify number of pins 01-64
FIG. 10	Series 383...001	Solder Cup / 3 Level Wrapost
FIG. 11	383-XX-1	-00-001000 Specify number of pins 01-64



XX=Plating Code See Below

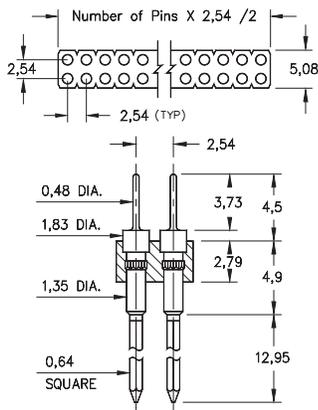
For Electrical, Mechanical & Environmental Data, See page 264

SPECIFY PLATING CODE XX=	10	90	40
Pin Plating	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn

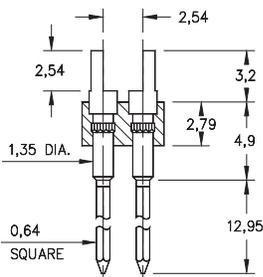


# INTERCONNECTS

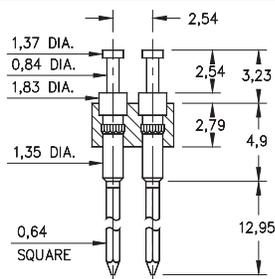
## SERIES 453, 463, 473, 483 • 2,54 GRID WRAPOST • DOUBLE ROW STRIPS



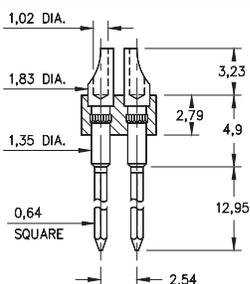
**FIG. 1**



**FIG. 2**



**FIG. 3**

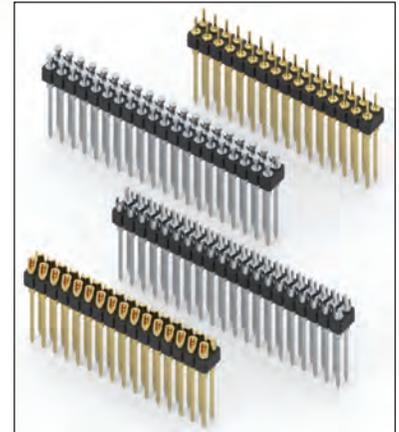


**FIG. 4**

- Series 453, 463, 473, and 483 double row header strips come in various styles (pin, slotted head, turret and solder cup) with wrapost tails

453...001 uses pin #5301  
 463...001 uses pin #1106-3  
 473...001 uses pin #0730-3  
 483...001 uses pin #8301-3  
 See pages 227 and 228 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



### ORDERING INFORMATION

	Series 453...001	Pin / 3 Level Wrapost
<b>FIG. 1</b>	453-10-2	-00-001000 Specify number of pins 04-64
<b>FIG. 2</b>	Series 463...001	Slotted Head / 3 Level Wrapost
	463-XX-2	-00-001000 Specify number of pins 02-64
<b>FIG. 3</b>	Series 473...001	Turret / 3 Level Wrapost
	473-XX-2	-00-001000 Specify number of pins 04-64
<b>FIG. 4</b>	Series 483...001	Solder Cup / 3 Level Wrapost
	483-XX-2	-00-001000 Specify number of pins 02-64



XX=Plating Code  
See Below

For  
Electrical, Mechanical  
& Environmental Data,  
See page 264

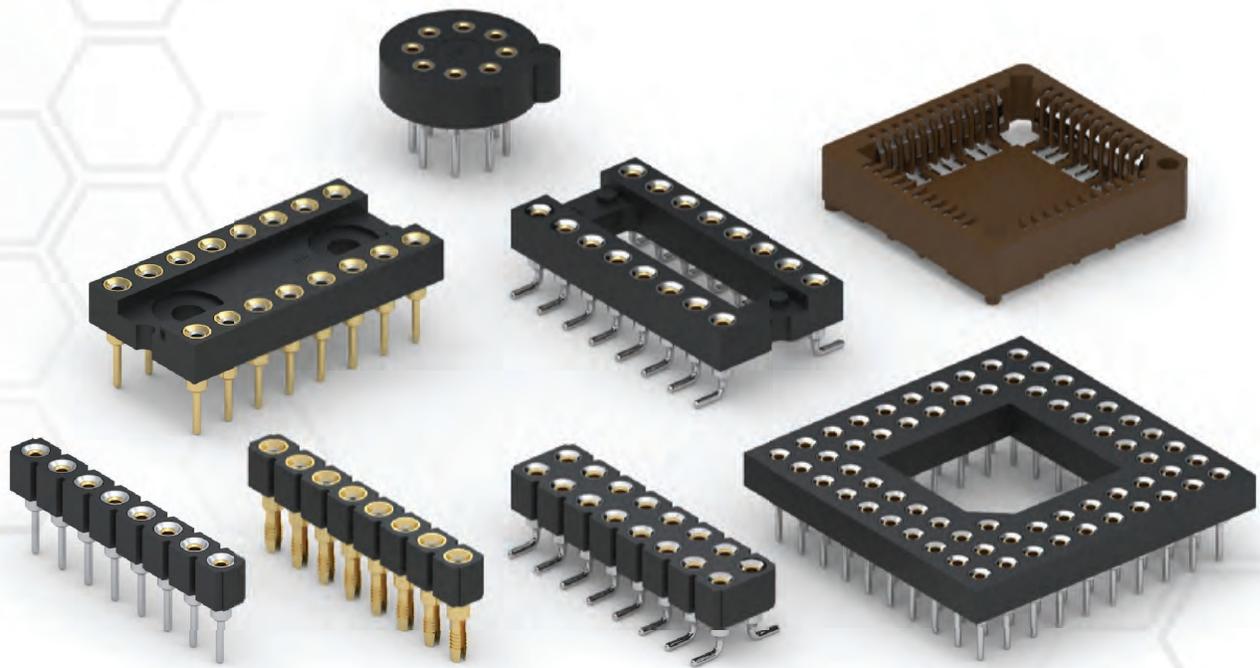
SPECIFY PLATING CODE XX=	10	90	40	
Pin Plating	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	





WWW.MILL-MAX.COM

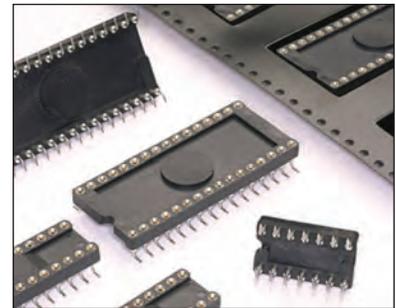
# IC SOCKETS TO SOCKETS





WWW.MILL-MAX.COM

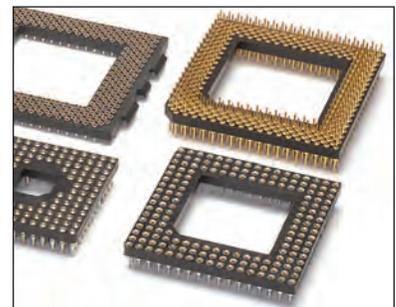
**MILL-MAX IC SOCKETS PROVIDE A VARIETY OF OPTIONS FOR MAKING DEVICE-TO-BOARD CONNECTIONS.** Our IC Sockets utilize the Mill-Max receptacle as the connection between the IC device and the circuit board. The precision-machined receptacle shell is available in multiple variations to fit many applications. We offer a wide choice of sockets in several board termination types including: solder-tail, press-fit, surface mount and wrapost. These sockets allow for upgradeability and field repair and provide versatility for device substitution between models of a product line.



IC Sockets can be loaded manually for soldering or press-fitting, or when volume placement is required, sockets can be packaged on tape and reel providing labor-saving solutions for our customers.

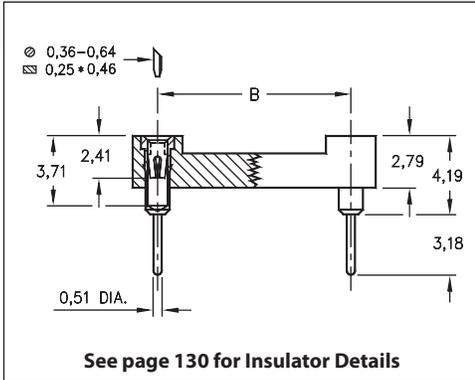


We will gladly quote custom application-specific products in addition to the products found on the following pages.

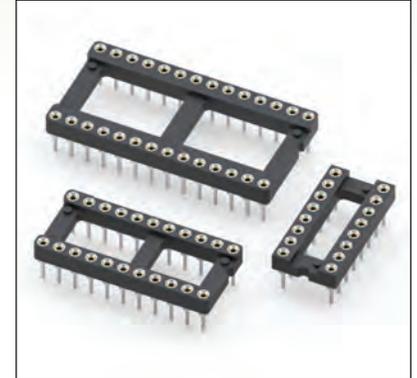


# DUAL-IN-LINE SOCKETS

## SERIES 110...001 • STANDARD SOLDER TAIL • OPEN FRAME



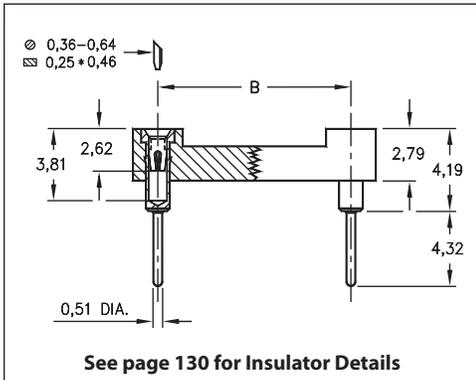
- All DIP sockets accept 0,38 - 0,64 diameter and standard IC leads
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110 uses MM #1001 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



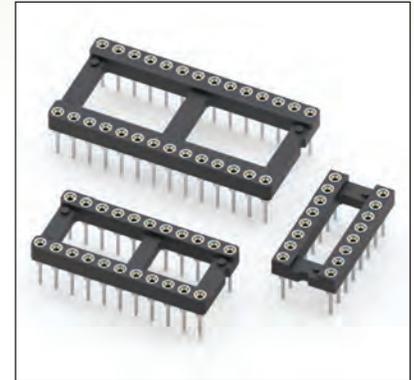
Total number of pins				Quantity per tube	<h3>ORDERING INFORMATION</h3>									
	A	B	C											
10	12,6	5,08	7,6	40	110-XX-210-41-001000									
4	5,0	7,62	10,1	102	110-XX-304-41-001000									
6	7,6	7,62	10,1	67	110-XX-306-41-001000									
8	10,1	7,62	10,1	50	110-XX-308-41-001000									
10	12,6	7,62	10,1	40	110-XX-310-41-001000									
14	17,7	7,62	10,1	28	110-XX-314-41-001000									
16	20,3	7,62	10,1	25	110-XX-316-41-001000									
18	22,8	7,62	10,1	22	110-XX-318-41-001000									
20	25,3	7,62	10,1	20	110-XX-320-41-001000									
22	27,8	7,62	10,1	18	110-XX-322-41-001000									
24	30,4	7,62	10,1	16	110-XX-324-41-001000									
28	35,5	7,62	10,1	14	110-XX-328-41-001000									
20	25,4	10,16	12,7	20	110-XX-420-41-001000									
22	27,8	10,16	12,7	18	110-XX-422-41-001000									
24	30,4	10,16	12,7	16	110-XX-424-41-001000									
28	35,5	10,16	12,7	14	110-XX-428-41-001000									
32	40,6	10,16	12,7	12	110-XX-432-41-001000									
24	30,4	15,24	17,7	16	110-XX-624-41-001000									
28	35,5	15,24	17,7	14	110-XX-628-41-001000									
32	40,6	15,24	17,7	12	110-XX-632-41-001000									
36	45,7	15,24	17,7	11	110-XX-636-41-001000									
40	50,8	15,24	17,7	10	110-XX-640-41-001000									
42	53,3	15,24	17,7	9	110-XX-642-41-001000									
48	60,9	15,24	17,7	8	110-XX-648-41-001000									
50	63,5	15,24	17,7	8	110-XX-650-41-001000									
52	66,0	15,24	17,7	7	110-XX-652-41-001000									
50	63,5	22,86	25,3	8	110-XX-950-41-001000									
52	66,0	22,86	25,3	7	110-XX-952-41-001000									
64	81,2	22,86	25,3	6	110-XX-964-41-001000									
<b>XX=Plating Code See Below</b>														
<b>SPECIFY PLATING CODE XX =</b>					11	13	91	93	99	41	43	44	47	
Sleeve (Pin)					0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	5,08µm Sn	
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn	Au Flash	

# DUAL-IN-LINE SOCKETS

## SERIES 111 • LONG SOLDER TAIL FOR MULTI-LAYER PCB • OPEN FRAME



- DIP sockets with increased solder tail length of 4,32, allowing application on multi-layer PCBs up to 3,53mm thick
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 111 uses MM #0134 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



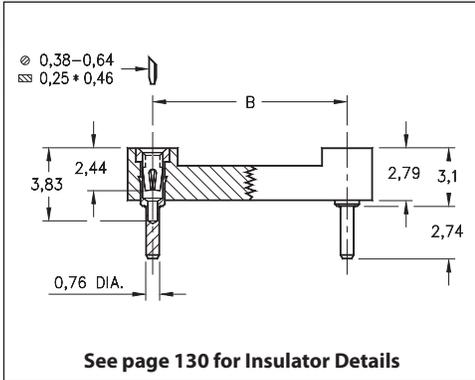
Total number of pins	Pin Pitch			Quantity per tube	ORDERING INFORMATION						
	A	B	C								
10	12,6	5,08	7,6	40	111-XX-210-41-001000						
4	5,0	7,62	10,1	102	111-XX-304-41-001000						
6	7,6	7,62	10,1	67	111-XX-306-41-001000						
8	10,1	7,62	10,1	50	111-XX-308-41-001000						
10	12,6	7,62	10,1	40	111-XX-310-41-001000						
14	17,7	7,62	10,1	28	111-XX-314-41-001000						
16	20,3	7,62	10,1	25	111-XX-316-41-001000						
18	22,8	7,62	10,1	22	111-XX-318-41-001000						
20	25,3	7,62	10,1	20	111-XX-320-41-001000						
22	27,8	7,62	10,1	18	111-XX-322-41-001000						
24	30,4	7,62	10,1	16	111-XX-324-41-001000						
28	35,5	7,62	10,1	14	111-XX-328-41-001000						
20	25,4	10,16	12,7	20	111-XX-420-41-001000						
22	27,8	10,16	12,7	18	111-XX-422-41-001000						
24	30,4	10,16	12,7	16	111-XX-424-41-001000						
28	35,5	10,16	12,7	14	111-XX-428-41-001000						
32	40,6	10,16	12,7	12	111-XX-432-41-001000						
24	30,4	15,24	17,7	16	111-XX-624-41-001000						
28	35,5	15,24	17,7	14	111-XX-628-41-001000						
32	40,6	15,24	17,7	12	111-XX-632-41-001000						
36	45,7	15,24	17,7	11	111-XX-636-41-001000						
40	50,8	15,24	17,7	10	111-XX-640-41-001000						
42	53,3	15,24	17,7	9	111-XX-642-41-001000						
48	60,9	15,24	17,7	8	111-XX-648-41-001000						
50	63,5	15,24	17,7	8	111-XX-650-41-001000						
52	66,0	15,24	17,7	7	111-XX-652-41-001000						
50	63,5	22,86	25,3	8	111-XX-950-41-001000						
52	66,0	22,86	25,3	7	111-XX-952-41-001000						
64	81,2	22,86	25,3	6	111-XX-964-41-001000						
SPECIFY PLATING CODE XX =					91	93		41	43	47	
					Sleeve (Pin) 	5,08µm Sn/Pb	5,08µm Sn/Pb		5,08µm Sn	5,08µm Sn	5,08µm Sn
					0,25µm Au	0,25µm Au		0,25µm Au	0,25µm Au	Au Flash	
					Contact (Clip) 						

XX=Plating Code  
See Below

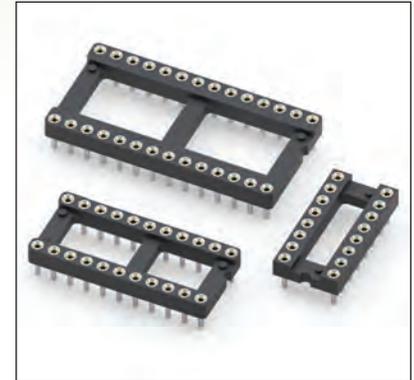


# DUAL-IN-LINE SOCKETS

## SERIES 115...001 • VERY LOW PROFILE • OPEN FRAME



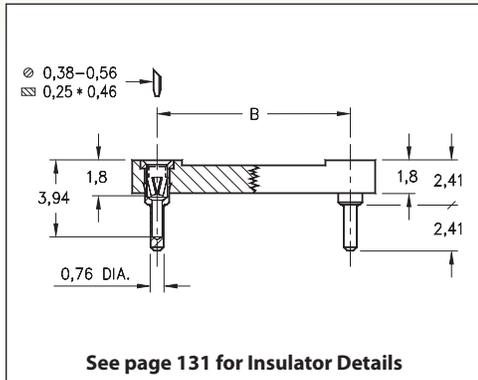
- Low profile DIP socket, sits only 3,1mm above the PCB
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 115 uses MM #0501 pins. See page 162 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



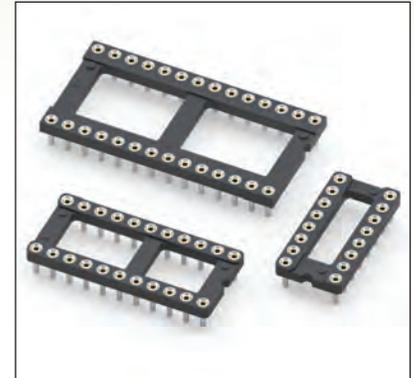
Total number of pins				Quantity per tube	<h3>ORDERING INFORMATION</h3>						
	A	B	C								
10	12,6	5,08	7,6	41	115-XX-210-41-001000						
4	5,0	7,62	10,1	102	115-XX-304-41-001000						
6	7,6	7,62	10,1	67	115-XX-306-41-001000						
8	10,1	7,62	10,1	50	115-XX-308-41-001000						
10	12,6	7,62	10,1	40	115-XX-310-41-001000						
14	17,7	7,62	10,1	28	115-XX-314-41-001000						
16	20,3	7,62	10,1	25	115-XX-316-41-001000						
18	22,8	7,62	10,1	22	115-XX-318-41-001000						
20	25,3	7,62	10,1	20	115-XX-320-41-001000						
22	27,8	7,62	10,1	18	115-XX-322-41-001000						
24	30,4	7,62	10,1	16	115-XX-324-41-001000						
28	35,5	7,62	10,1	14	115-XX-328-41-001000						
20	25,4	10,16	12,7	20	115-XX-420-41-001000						
22	27,8	10,16	12,7	18	115-XX-422-41-001000						
24	30,4	10,16	12,7	16	115-XX-424-41-001000						
28	35,5	10,16	12,7	14	115-XX-428-41-001000						
32	40,6	10,16	12,7	12	115-XX-432-41-001000						
24	30,4	15,24	17,7	16	115-XX-624-41-001000						
28	35,5	15,24	17,7	14	115-XX-628-41-001000						
32	40,6	15,24	17,7	12	115-XX-632-41-001000						
36	45,7	15,24	17,7	11	115-XX-636-41-001000						
40	50,8	15,24	17,7	10	115-XX-640-41-001000						
42	53,3	15,24	17,7	9	115-XX-642-41-001000						
48	60,9	15,24	17,7	8	115-XX-648-41-001000						
50	63,5	15,24	17,7	8	115-XX-650-41-001000						
52	66,0	15,24	17,7	7	115-XX-652-41-001000						
50	63,5	22,86	25,3	8	115-XX-950-41-001000						
52	66,0	22,86	25,3	7	115-XX-952-41-001000						
64	81,2	22,86	25,3	6	115-XX-964-41-001000						
<b>SPECIFY PLATING CODE XX =</b>					91	93	41	43	47		
					Sleeve (Pin)	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	
<b>XX=Plating Code See Below</b>					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash		
					Contact (Clip)						

# DUAL-IN-LINE SOCKETS

## SERIES 115...003 • ULTRA LOW PROFILE • OPEN FRAME



- Our lowest profile DIP socket with an above PCB height of only 2,41mm
- Special short Hi-Rel, 4-finger BeCu #12 contact is rated at 3 amps. See page 252 for details
- Series 115 uses MM #1534 pins. See page 161 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	<h3>ORDERING INFORMATION</h3>							
	A	B	C									
6	7,6	7,62	10,1	68	115-XX-306-41-003000							
8	10,1	7,62	10,1	50	115-XX-308-41-003000							
14	17,7	7,62	10,1	28	115-XX-314-41-003000							
16	20,3	7,62	10,1	25	115-XX-316-41-003000							
18	22,8	7,62	10,1	22	115-XX-318-41-003000							
20	25,3	7,62	10,1	20	115-XX-320-41-003000							
22	27,8	7,62	10,1	18	115-XX-322-41-003000							
24	30,4	7,62	10,1	16	115-XX-324-41-003000							
28	35,5	7,62	10,1	14	115-XX-328-41-003000							
20	25,4	10,16	12,7	20	115-XX-420-41-003000							
22	27,8	10,16	12,7	18	115-XX-422-41-003000							
24	30,4	10,16	12,7	16	115-XX-424-41-003000							
28	35,5	10,16	12,7	14	115-XX-428-41-003000							
24	30,4	15,24	17,7	16	115-XX-624-41-003000							
28	35,5	15,24	17,7	14	115-XX-628-41-003000							
32	40,6	15,24	17,7	12	115-XX-632-41-003000							
36	45,7	15,24	17,7	11	115-XX-636-41-003000							
40	50,8	15,24	17,7	10	115-XX-640-41-003000							
48	60,9	15,24	17,7	8	115-XX-648-41-003000							
50	63,5	15,24	17,7	8	115-XX-650-41-003000							

XX=Plating Code  
See Below

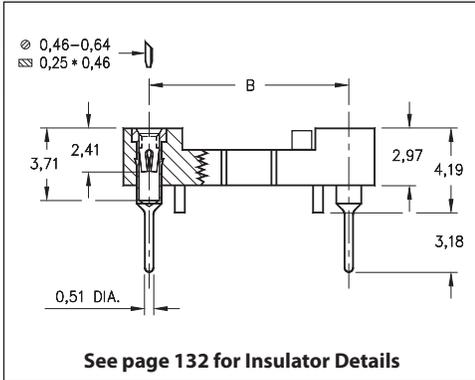


SPECIFY PLATING CODE XX =	91	93	41 ◆	43 ◆	44 ◆	47 ◆
Sleeve (Pin)	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn	Au Flash

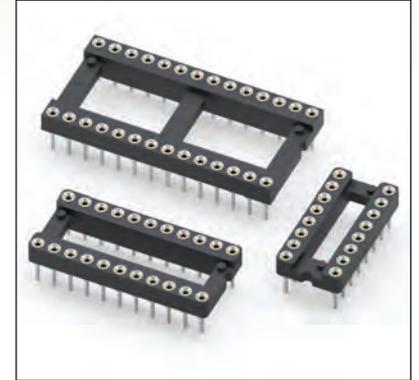


# DUAL-IN-LINE SOCKETS

## SERIES 110...605 • AUTOMATIC INSERTION • OPEN FRAME



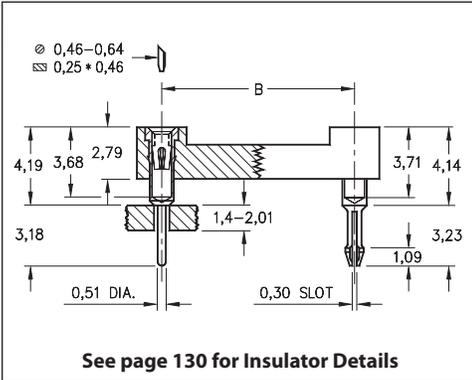
- High temperature thermoplastic insulator with standoffs is compatible with standard automatic insertion equipment and all soldering processes
- Soft copper alloy machined pins allow clinching. Chamfered contact entry allows for ease of IC insertion without bent leads
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110 uses MM #1005 pins. See page 166 for details
- For Electrical, Mechanical and Environmental Data, see page 264 for details



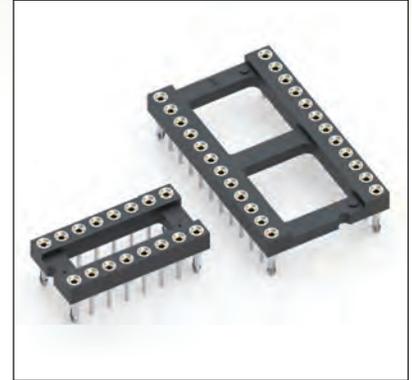
Total number of pins				Quantity per tube	ORDERING INFORMATION							
	A	B	C									
6	7,6	7,62	10,1	67	110-XX-306-41-605000							
8	10,1	7,62	10,1	50	110-XX-308-41-605000							
14	17,7	7,62	10,1	28	110-XX-314-41-605000							
16	20,3	7,62	10,1	25	110-XX-316-41-605000							
18	22,8	7,62	10,1	22	110-XX-318-41-605000							
20	25,3	7,62	10,1	20	110-XX-320-41-605000							
24	30,4	7,62	10,1	16	110-XX-324-41-605000							
22	27,8	10,16	12,7	18	110-XX-422-41-605000							
24	30,4	15,24	17,7	16	110-XX-624-41-605000							
28	35,5	15,24	17,7	14	110-XX-628-41-605000							
32	40,6	15,24	17,7	12	110-XX-632-41-605000							
40	50,8	15,24	17,7	10	110-XX-640-41-605000							
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> <b>XX=Plating Code See Below</b> </div>					<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>RoHS-2 2011/65/EU</b> </div>							
<b>SPECIFY PLATING CODE XX =</b>					91	93	41	43	47			
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn			
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash			

# DUAL-IN-LINE SOCKETS

## SERIES 101 • CLINCH PIN • OPEN FRAME



- Special lock-down feature prevents floating of socket during soldering. Open insulator with ladder construction
- Socket pins feature closed end construction eliminating any solder wicking problems
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 101 uses MM #1001 and MM #0156 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



### ORDERING INFORMATION

Total number of pins	Pin Spacing			Quantity per tube	Part Number
	A	B	C		
6	7,6	7,62	10,1	67	101-93-306-41-56X000
8	10,1	7,62	10,1	50	101-93-308-41-56X000
14	17,7	7,62	10,1	28	101-93-314-41-56X000
16	20,3	7,62	10,1	25	101-93-316-41-56X000
18	22,8	7,62	10,1	22	101-93-318-41-56X000
20	25,3	7,62	10,1	20	101-93-320-41-56X000
24	30,4	7,62	10,1	16	101-93-324-41-56X000
28	35,5	7,62	10,1	14	101-93-328-41-56X000
22	27,8	10,16	12,7	18	101-93-422-41-56X000
24	30,4	15,24	17,7	16	101-93-624-41-56X000
28	35,5	15,24	17,7	14	101-93-628-41-56X000
32	40,6	15,24	17,7	12	101-93-632-41-56X000
40	50,8	15,24	17,7	10	101-93-640-41-56X000
48	60,9	15,24	17,7	8	101-93-648-41-56X000
64	81,2	22,86	25,3	6	101-93-964-41-56X000

**Clinch Pins:**

Two Opposite Corner Pins **X = 0**

Four Corner Pins **X = 8**

XX=Plating Code  
See Below

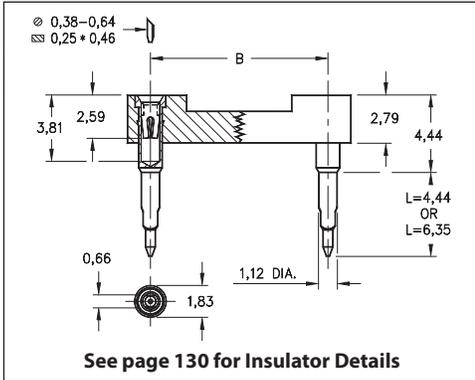


SPECIFY PLATING CODE XX =		93			
Sleeve (Pin)		5,08µm Sn/Pb			
Contact (Clip)		0,76µm Au			



# DUAL-IN-LINE SOCKETS

## SERIES 104 • SOLDERLESS PRESS-FIT • OPEN FRAME



- Designed for solderless press-fit into plated through-holes
- Pin lengths are suitable for 1,57 and 2,36 - 3,18 thick panels
- Required plated through hole is 0,91 - 1,04. Use a 1.1mm drill prior to plating
- Series 104 uses MM #0477 or MM #0478 pins with a BeCu #30 contact, rated at 3 amps. See page 162 for details
- Insulators are high temperature thermoplastic
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION					
	A	B	C		L = 4,44 (for 1,57 thick panel)	L = 6,35 (for 3,18 thick panel)				
10	12,6	5,08	7,6	40	104-XX-210-41-770000	104-XX-210-41-780000				
4	5,0	7,62	10,1	102	104-XX-304-41-770000	104-XX-304-41-780000				
6	7,6	7,62	10,1	67	104-XX-306-41-770000	104-XX-306-41-780000				
8	10,1	7,62	10,1	50	104-XX-308-41-770000	104-XX-308-41-780000				
10	12,6	7,62	10,1	40	104-XX-310-41-770000	104-XX-310-41-780000				
14	17,7	7,62	10,1	28	104-XX-314-41-770000	104-XX-314-41-780000				
16	20,3	7,62	10,1	25	104-XX-316-41-770000	104-XX-316-41-780000				
18	22,8	7,62	10,1	22	104-XX-318-41-770000	104-XX-318-41-780000				
20	25,3	7,62	10,1	20	104-XX-320-41-770000	104-XX-320-41-780000				
22	27,8	7,62	10,1	18	104-XX-322-41-770000	104-XX-322-41-780000				
24	30,4	7,62	10,1	16	104-XX-324-41-770000	104-XX-324-41-780000				
28	35,5	7,62	10,1	14	104-XX-328-41-770000	104-XX-328-41-780000				
20	25,4	10,16	12,7	20	104-XX-420-41-770000	104-XX-420-41-780000				
22	27,8	10,16	12,7	18	104-XX-422-41-770000	104-XX-422-41-780000				
24	30,4	10,16	12,7	16	104-XX-424-41-770000	104-XX-424-41-780000				
28	35,5	10,16	12,7	14	104-XX-428-41-770000	104-XX-428-41-780000				
32	40,6	10,16	12,7	12	104-XX-432-41-770000	104-XX-432-41-780000				
24	30,4	15,24	17,7	16	104-XX-624-41-770000	104-XX-624-41-780000				
28	35,5	15,24	17,7	14	104-XX-628-41-770000	104-XX-628-41-780000				
32	40,6	15,24	17,7	12	104-XX-632-41-770000	104-XX-632-41-780000				
36	45,7	15,24	17,7	11	104-XX-636-41-770000	104-XX-636-41-780000				
40	50,8	15,24	17,7	10	104-XX-640-41-770000	104-XX-640-41-780000				
42	53,3	15,24	17,7	9	104-XX-642-41-770000	104-XX-642-41-780000				
48	60,9	15,24	17,7	8	104-XX-648-41-770000	104-XX-648-41-780000				
50	63,5	15,24	17,7	8	104-XX-650-41-770000	104-XX-650-41-780000				
52	66,0	15,24	17,7	7	104-XX-652-41-770000	104-XX-652-41-780000				
50	63,5	22,86	25,3	8	104-XX-950-41-770000	104-XX-950-41-780000				
52	66,0	22,86	25,3	7	104-XX-952-41-770000	104-XX-952-41-780000				
64	81,2	22,86	25,3	6	104-XX-964-41-770000	104-XX-964-41-780000				
<b>SPECIFY PLATING CODE XX =</b>					11	13				
Sleeve (Pin)					0,25µm Au	0,25µm Au				
Contact (Clip)					0,25µm Au	0,76µm Au				

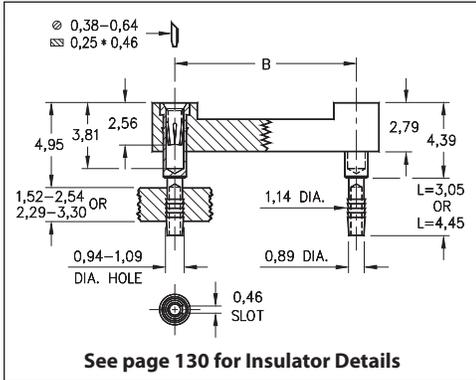


XX=Plating Code  
See Below

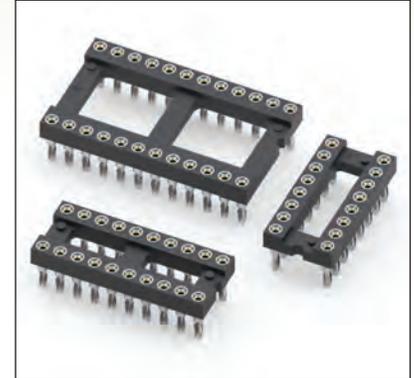


# DUAL-IN-LINE SOCKETS

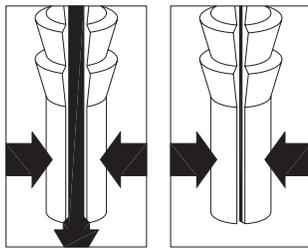
## SERIES 146 • SOLDERLESS PRESS-FIT, COMPLIANT TAIL • OPEN FRAME



- Unique compliant tail pins conform to a  $1,02 \pm 0,76$  finished plated through hole diameter without stressing inner layers
- Two tails lengths are offered for 1,52 - 2,54 and 2,29 - 3,30 thick panels
- Series 146 uses MM #4612 or MM #4613 pins with a BeCu #30 contact, rated at 3 amps. See page 162 for details
- Insulators are high temperature thermoplastic
- For Electrical, Mechanical and Environmental Data, see page 264 for details



### APPLICATION OF COMPLIANT TAIL PINS



Mill-Max's patented\* precision-machined pins feature compliant tails that are hollow and slotted to conform to a  $1,02 \pm 0,76$  diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration at left). The pin's tail has fine serrations that form a perfect "gas tight" connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.

\*Patent No. 4,799,904.

Total number of pins				Quantity per tube	ORDERING INFORMATION			
	A	B	C		L = 3,05 (for 1,52 - 2,54 thick panel)	L = 4,45 (for 2,29 - 3,30 thick panel)		
6	7,6	7,62	10,1	67	146-XX-306-41-012000	146-XX-306-41-013000		
8	10,1	7,62	10,1	50	146-XX-308-41-012000	146-XX-308-41-013000		
14	17,7	7,62	10,1	28	146-XX-314-41-012000	146-XX-314-41-013000		
16	20,3	7,62	10,1	25	146-XX-316-41-012000	146-XX-316-41-013000		
18	22,8	7,62	10,1	22	146-XX-318-41-012000	146-XX-318-41-013000		
20	25,3	7,62	10,1	20	146-XX-320-41-012000	146-XX-320-41-013000		
24	30,4	7,62	10,1	16	146-XX-324-41-012000	146-XX-324-41-013000		
22	27,8	10,16	12,7	18	146-XX-422-41-012000	146-XX-422-41-013000		
24	30,4	15,24	17,7	16	146-XX-624-41-012000	146-XX-624-41-013000		
28	35,5	15,24	17,7	14	146-XX-628-41-012000	146-XX-628-41-013000		
32	40,6	15,24	17,7	12	146-XX-632-41-012000	146-XX-632-41-013000		
40	50,8	15,24	17,7	10	146-XX-640-41-012000	146-XX-640-41-013000		
<b>SPECIFY PLATING CODE XX =</b>					91	93	41	43
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)					0,25µm Au	0,25µm Au	0,25µm Au	0,25µm Au

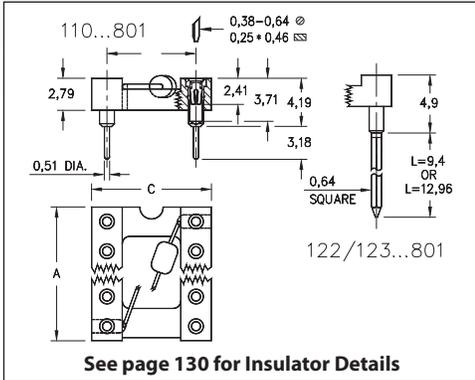


XX=Plating Code  
See Below



# DUAL-IN-LINE SOCKETS

## SERIES 110, 122, 123 • INTEGRAL DECOUPLING CAPACITOR • OPEN FRAME



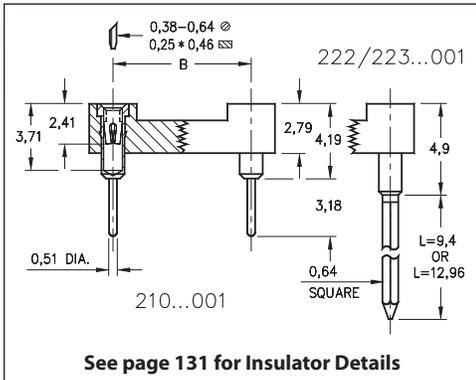
- Low profile DIP sockets w/ integral decoupling capacitor: .1μ F 20%-50V multi-layer ceramic epoxy encapsulated. Temp. range: -25° C to +85° C
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110, 122 and 123 use MM #1001, #0088 or #0089 pins. See pages 165 & 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION		
	A	B	C		Solder Tail	L = 9,4 (2 Level Wrappost)	L = 12,96 (3 Level Wrappost)
14	17,7	7,62	10,1	28	110-XX-314-41-801000	122-XX-314-41-801000	123-XX-314-41-801000
16	20,3	7,62	10,1	25	110-XX-316-41-801000	122-XX-316-41-801000	123-XX-316-41-801000
18	22,8	7,62	10,1	22	110-XX-318-41-801000	122-XX-318-41-801000	123-XX-318-41-801000
20	25,3	7,62	10,1	20	110-XX-320-41-801000	122-XX-320-41-801000	123-XX-320-41-801000
22	27,8	7,62	10,1	18	110-XX-322-41-801000	122-XX-322-41-801000	123-XX-322-41-801000
24	30,4	7,62	10,1	16	110-XX-324-41-801000	122-XX-324-41-801000	123-XX-324-41-801000
28	35,5	7,62	10,1	14	110-XX-328-41-801000	122-XX-328-41-801000	123-XX-328-41-801000
24	30,4	15,24	17,7	16	110-XX-624-41-801000	122-XX-624-41-801000	123-XX-624-41-801000
28	35,5	15,24	17,7	14	110-XX-628-41-801000	122-XX-628-41-801000	123-XX-628-41-801000
32	40,6	15,24	17,7	12	110-XX-632-41-801000	122-XX-632-41-801000	123-XX-632-41-801000
40	50,8	15,24	17,7	10	110-XX-640-41-801000	122-XX-640-41-801000	123-XX-640-41-801000
SPECIFY PLATING CODE XX =					13	93	43
Sleeve (Pin)					0,25μm Au	5,08μm Sn/Pb	5,08μm Sn
Contact (Clip)					0,76μm Au	0,76μm Au	0,76μm Au

# DUAL-IN-LINE SOCKETS

## SERIES 210, 222, 223 • SOLDER TAIL AND WRAPOST • CLOSED FRAME



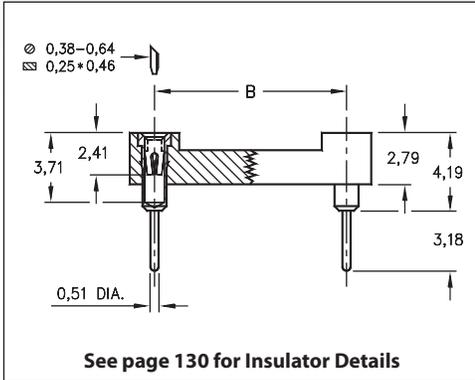
- Closed frame insulator withstands high mechanical impact
- Available with standard solder pins, 2-level or 3-level wraposts
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 210, 222 and 223 use MM #1001, #0088 or #0089 pins. See pages 165 & 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



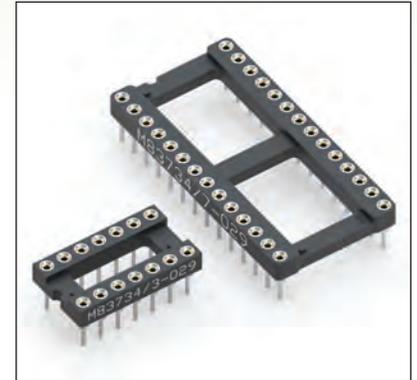
Total number of pins				Quantity per tube	ORDERING INFORMATION								
	A	B	C		Solder Tail	L = 9,4 (2 Level Wrapost)	L = 12,96 (3 Level Wrapost)						
6	7,6	7,62	10,1	67	210-XX-306-41-001000	222-XX-306-41-001000	223-XX-306-41-001000						
8	10,1	7,62	10,1	50	210-XX-308-41-001000	222-XX-308-41-001000	223-XX-308-41-001000						
10	12,6	7,62	10,1	40	210-XX-310-41-001000	222-XX-310-41-001000	223-XX-310-41-001000						
14	17,7	7,62	10,1	28	210-XX-314-41-001000	222-XX-314-41-001000	223-XX-314-41-001000						
16	20,3	7,62	10,1	25	210-XX-316-41-001000	222-XX-316-41-001000	223-XX-316-41-001000						
18	22,8	7,62	10,1	22	210-XX-318-41-001000	222-XX-318-41-001000	223-XX-318-41-001000						
20	25,3	7,62	10,1	20	210-XX-320-41-001000	222-XX-320-41-001000	223-XX-320-41-001000						
22	27,8	7,62	10,1	18	210-XX-322-41-001000	222-XX-322-41-001000	223-XX-322-41-001000						
24	30,4	7,62	10,1	16	210-XX-324-41-001000	222-XX-324-41-001000	223-XX-324-41-001000						
22	27,8	10,16	12,7	18	210-XX-422-41-001000	222-XX-422-41-001000	223-XX-422-41-001000						
24	30,4	10,16	12,7	16	210-XX-424-41-001000	222-XX-424-41-001000	223-XX-424-41-001000						
24	30,4	15,24	17,7	16	210-XX-624-41-001000	222-XX-624-41-001000	223-XX-624-41-001000						
28	35,5	15,24	17,7	14	210-XX-628-41-001000	222-XX-628-41-001000	223-XX-628-41-001000						
32	40,6	15,24	17,7	12	210-XX-632-41-001000	222-XX-632-41-001000	223-XX-632-41-001000						
36	45,7	15,24	17,7	11	210-XX-636-41-001000	222-XX-636-41-001000	223-XX-636-41-001000						
40	50,8	15,24	17,7	10	210-XX-640-41-001000	222-XX-640-41-001000	223-XX-640-41-001000						
64	81,2	22,86	25,3	6	210-XX-964-41-001000	222-XX-964-41-001000	223-XX-964-41-001000						
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> <b>XX=Plating Code See Below</b> </div>					<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block; background-color: #90EE90;"> <b>RoHS - 2 2011/65/EU</b> </div>								
<b>SPECIFY PLATING CODE XX =</b>					11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆	47 ◆
Sleeve (Pin)					0,25µm Au	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,25µm Au	0,76µm Au	2,54µm Sn	Au Flash

# DUAL-IN-LINE SOCKETS

**SERIES 110...530 • MIL-DTL-83734 APPROVED, SOLDER TAIL • OPEN FRAME**



- Sockets are XY stackable
- Socket pins feature closed end construction eliminating any solder wicking problems
- Packaged in tubes compatible with automatic insertion equipment
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110 uses MM #1001 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION	
	A	B	C		Mill-Max Part Number	Military Part Number
8	10,1	7,62	10,1	50	110-XX-308-41-530000	M83734/2-YYY
14	17,7	7,62	10,1	28	110-XX-314-41-530000	M83734/3-YYY
16	20,3	7,62	10,1	25	110-XX-316-41-530000	M83734/4-YYY
18	22,8	7,62	10,1	22	110-XX-318-41-530000	M83734/5-YYY
20	25,3	7,62	10,1	20	110-XX-320-41-530000	M83734/13-YYY
22	27,8	10,16	12,7	18	110-XX-422-41-530000	M83734/6-YYY
24	30,4	15,24	17,7	16	110-XX-624-41-530000	M83734/8-YYY
28	35,5	15,24	17,7	14	110-XX-628-41-530000	M83734/7-YYY
40	50,8	15,24	17,7	10	110-XX-640-41-530000	M83734/10-YYY
48	60,9	15,24	17,7	8	110-XX-648-41-530000	M83734/14-YYY
64	81,2	22,86	25,3	6	110-XX-964-41-530000	M83734/15-YYY

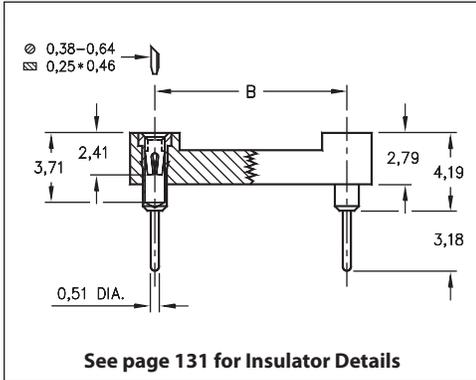
XX=Plating Code  
See Below

SEE PAGE 103 FOR COMPLETE MIL-DTL-83734 QPL			
SPECIFY MILL-MAX PLATING CODE XX =	<b>33</b>	<b>83</b>	<b>88</b>
FOR MILITARY PLATING CODE YYY =	<b>028</b>	<b>029</b>	<b>030</b>
Sleeve (Pin)	0,76µm min. Au	7,62µm Sn/Pb	7,62µm Sn/Pb
Contact (Clip)	0,76µm min. Au	0,76µm min. Au	2,54µm Sn/Pb



# DUAL-IN-LINE SOCKETS

**SERIES 210...101 • MIL-DTL-83734 APPROVED, SOLDER TAIL • CLOSED FRAME**



- Sockets are XY stackable
- Socket pins feature closed end construction eliminating any solder wicking problems
- Packaged in tubes compatible with automatic insertion equipment
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 210 uses MM #1001 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION	
	A	B	C		Mill-Max Part Number	Military Part Number
6	7,6	7,62	10,1	67	210-XX-306-41-101000	M83734/1-YYY
8	10,1	7,62	10,1	50	210-XX-308-41-101000	M83734/2-YYY
14	17,7	7,62	10,1	28	210-XX-314-41-101000	M83734/3-YYY
16	20,3	7,62	10,1	25	210-XX-316-41-101000	M83734/4-YYY
18	22,8	7,62	10,1	22	210-XX-318-41-101000	M83734/5-YYY
20	25,3	7,62	10,1	20	210-XX-320-41-101000	M83734/13-YYY
22	27,8	10,16	12,7	18	210-XX-422-41-101000	M83734/6-YYY
24	30,4	15,24	17,7	16	210-XX-624-41-101000	M83734/8-YYY
28	35,5	15,24	17,7	14	210-XX-628-41-101000	M83734/7-YYY
32	40,6	15,24	17,7	10	210-XX-632-41-101000	M83734/17-YYY
36	45,7	15,24	17,7	11	210-XX-636-41-101000	M83734/9-YYY
40	50,8	15,24	17,7	8	210-XX-640-41-101000	M83734/10-YYY
64	81,2	22,86	25,3	6	210-XX-964-41-101000	M83734/15-YYY

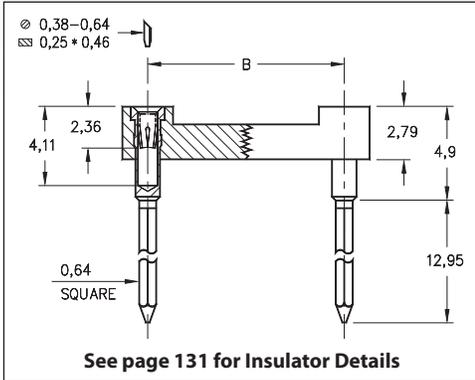
XX=Plating Code  
See Below

SEE PAGE 103 FOR COMPLETE MIL-DTL-83734 QPL			
SPECIFY MILL-MAX PLATING CODE XX =	33	83	88
FOR MILITARY PLATING CODE YYY =	031	032	033
(6 PIN ONLY) YYY =	025	026	027
(32 PIN ONLY) YYY =	013	014	015
Sleeve (Pin)	0,76µm min. Au	7,62µm Sn/Pb	7,62µm Sn/Pb
Contact (Clip)	0,76µm min. Au	0,76µm min. Au	2,54µm Sn/Pb

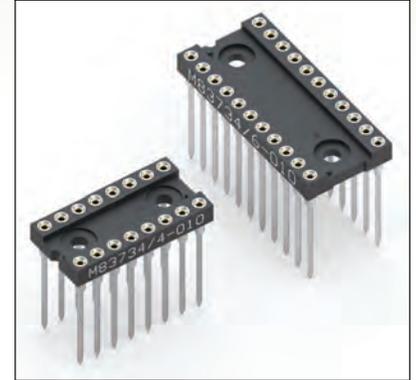


# DUAL-IN-LINE SOCKETS

**SERIES 223...101 • MIL-DTL-83734 APPROVED, 3 LEVEL WRAPOST • CLOSED FRAME**



- Sockets are XY stackable
- Socket pins feature closed end construction eliminating any solder wicking problems
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 223 uses MM #0038-3 or #0088-3 pins. See page 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION			
	A	B	C		Mill-Max Part Number		Military Part Number	
6	7,6	7,62	10,1	67	223-XX-306-41-101000	M83734/1-YYY		
8	10,1	7,62	10,1	50	223-XX-308-41-101000	M83734/2-YYY		
14	17,7	7,62	10,1	28	223-XX-314-41-101000	M83734/3-YYY		
16	20,3	7,62	10,1	25	223-XX-316-41-101000	M83734/4-YYY		
18	22,8	7,62	10,1	22	223-XX-318-41-101000	M83734/5-YYY		
20	25,3	7,62	10,1	20	223-XX-320-41-101000	M83734/13-YYY		
22	27,8	10,16	12,7	18	223-XX-422-41-101000	M83734/6-YYY		
24	30,4	15,24	17,7	16	223-XX-624-41-101000	M83734/8-YYY		
28	35,5	15,24	17,7	14	223-XX-628-41-101000	M83734/7-YYY		
32	40,6	15,24	17,7	12	223-XX-632-41-101000	M83734/17-YYY		
36	45,7	15,24	17,7	11	223-XX-636-41-101000	M83734/9-YYY		
40	50,8	15,24	17,7	10	223-XX-640-41-101000	M83734/10-YYY		
64	81,2	22,86	25,3	6	223-XX-964-41-101000	M83734/15-YYY		
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     XX=Plating Code See Below                 </div>					SEE PAGE 103 FOR COMPLETE MIL-DTL-83734 QPL			
SPECIFY MILL-MAX PLATING CODE XX =					33	83	88	
SPECIFY MILL-MAX PLATING CODE XX =					010	011	012	
(32 PIN ONLY) YYY =					007	008	009	
Sleeve (Pin)					0,76µm min. Au	7,62µm Sn/Pb	7,62µm Sn/Pb	
Contact (Clip)					0,76µm min. Au	0,76µm min. Au	2,54µm Sn/Pb	



# DUAL-IN-LINE SOCKETS

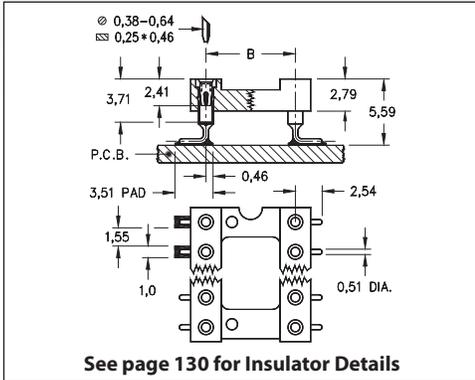
## DIP SOCKETS QUALIFIED TO MIL-DTL-83734

MIL SPEC #	MILL-MAX #	MIL SPEC #	MILL-MAX #	MIL SPEC #	MILL-MAX #
M83734/1-010	223-33-306-41-101000	M83734/7-010	223-33-628-41-101000	M83734/15-030	110-88-964-41-530000
M83734/1-011	223-83-306-41-101000	M83734/7-011	223-83-628-41-101000	M83734/15-031	210-33-964-41-101000
M83734/1-012	223-88-306-41-101000	M83734/7-012	223-88-628-41-101000	M83734/15-032	210-83-964-41-101000
M83734/1-025	210-33-306-41-101000	M83734/7-028	110-33-628-41-530000	M83734/15-033	210-88-964-41-101000
M83734/1-026	210-83-306-41-101000	M83734/7-029	110-83-628-41-530000		
M83734/1-027	210-88-306-41-101000	M83734/7-030	110-88-628-41-530000	M83734/17-001	221-33-632-41-101000
		M83734/7-031	210-33-628-41-101000	M83734/17-002	221-83-632-41-101000
M83734/2-010	223-33-308-41-101000	M83734/7-032	210-83-628-41-101000	M83734/17-003	221-88-632-41-101000
M83734/2-011	223-83-308-41-101000	M83734/7-033	210-88-628-41-101000	M83734/17-004	222-33-632-41-101000
M83734/2-012	223-88-308-41-101000			M83734/17-005	222-83-632-41-101000
M83734/2-028	110-33-308-41-530000	M83734/8-010	223-33-624-41-101000	M83734/17-006	222-88-632-41-101000
M83734/2-029	110-83-308-41-530000	M83734/8-011	223-83-624-41-101000	M83734/17-007	223-33-632-41-101000
M83734/2-030	110-88-308-41-530000	M83734/8-012	223-88-624-41-101000	M83734/17-008	223-83-632-41-101000
M83734/2-031	210-33-308-41-101000	M83734/8-028	110-33-624-41-530000	M83734/17-009	223-88-632-41-101000
M83734/2-032	210-83-308-41-101000	M83734/8-029	110-83-624-41-530000	M83734/17-013	210-33-632-41-101000
M83734/2-033	210-88-308-41-101000	M83734/8-030	110-88-624-41-530000	M83734/17-014	210-83-632-41-101000
		M83734/8-031	210-33-624-41-101000	M83734/17-015	210-88-632-41-101000
M83734/3-010	223-33-314-41-101000	M83734/8-032	210-83-624-41-101000		
M83734/3-011	223-83-314-41-101000	M83734/8-033	210-88-624-41-101000		
M83734/3-012	223-88-314-41-101000				
M83734/3-028	110-33-314-41-530000	M83734/9-010	223-33-636-41-101000		
M83734/3-029	110-83-314-41-530000	M83734/9-011	223-83-636-41-101000		
M83734/3-030	110-88-314-41-530000	M83734/9-012	223-88-636-41-101000		
M83734/3-031	210-33-314-41-101000	M83734/9-031	210-33-636-41-101000		
M83734/3-032	210-83-314-41-101000	M83734/9-032	210-83-636-41-101000		
M83734/3-033	210-88-314-41-101000	M83734/9-033	210-88-636-41-101000		
M83734/4-010	223-33-316-41-101000	M83734/10-010	223-33-640-41-101000		
M83734/4-011	223-83-316-41-101000	M83734/10-011	223-83-640-41-101000		
M83734/4-012	223-88-316-41-101000	M83734/10-012	223-88-640-41-101000		
M83734/4-028	110-33-316-41-530000	M83734/10-028	110-33-640-41-530000		
M83734/4-029	110-83-316-41-530000	M83734/10-029	110-83-640-41-530000		
M83734/4-030	110-88-316-41-530000	M83734/10-030	110-88-640-41-530000		
M83734/4-031	210-33-316-41-101000	M83734/10-031	210-33-640-41-101000		
M83734/4-032	210-83-316-41-101000	M83734/10-032	210-83-640-41-101000		
M83734/4-033	210-88-316-41-101000	M83734/10-033	210-88-640-41-101000		
M83734/5-010	223-33-318-41-101000	M83734/13-010	223-33-320-41-101000		
M83734/5-011	223-83-318-41-101000	M83734/13-011	223-83-320-41-101000		
M83734/5-012	223-88-318-41-101000	M83734/13-012	223-88-320-41-101000		
M83734/5-028	110-33-318-41-530000	M83734/13-028	110-33-320-41-530000		
M83734/5-029	110-83-318-41-530000	M83734/13-029	110-83-320-41-530000		
M83734/5-030	110-88-318-41-530000	M83734/13-030	110-88-320-41-530000		
M83734/5-031	210-33-318-41-101000	M83734/13-031	210-33-320-41-101000		
M83734/5-032	210-83-318-41-101000	M83734/13-032	210-83-320-41-101000		
M83734/5-033	210-88-318-41-101000	M83734/13-033	210-88-320-41-101000		
M83734/6-010	223-33-422-41-101000	M83734/14-028	110-33-648-41-530000		
M83734/6-011	223-83-422-41-101000	M83734/14-029	110-83-648-41-530000		
M83734/6-012	223-88-422-41-101000	M83734/14-030	110-88-648-41-530000		
M83734/6-028	110-33-422-41-530000				
M83734/6-029	110-83-422-41-530000	M83734/15-010	223-33-964-41-101000		
M83734/6-030	110-88-422-41-530000	M83734/15-011	223-83-964-41-101000		
M83734/6-031	210-33-422-41-101000	M83734/15-012	223-88-964-41-101000		
M83734/6-032	210-83-422-41-101000	M83734/15-028	110-33-964-41-530000		
M83734/6-033	210-88-422-41-101000	M83734/15-029	110-83-964-41-530000		

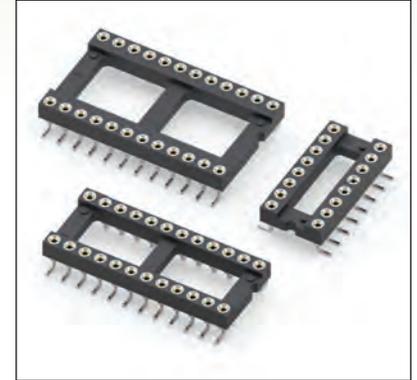


# DUAL-IN-LINE SOCKETS

## SERIES 110...105 • SURFACE MOUNT, GULL WING • OPEN FRAME



- Socket pins feature closed end construction eliminating any solder wicking problems
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints. Series 110 uses Mill-Max #1005 pins. See page 166 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



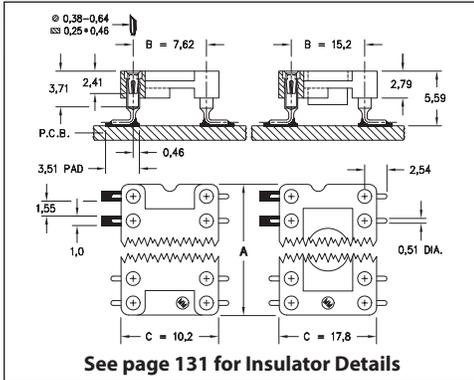
Total number of pins				Quantity per tube	ORDERING INFORMATION							
	A	B	C									
10	12,6	5,08	7,6	40	110-XX-210-41-105000							
4	5,0	7,62	10,1	102	110-XX-304-41-105000							
6	7,6	7,62	10,1	67	110-XX-306-41-105000							
8	10,1	7,62	10,1	50	110-XX-308-41-105000							
10	12,6	7,62	10,1	40	110-XX-310-41-105000							
14	17,7	7,62	10,1	28	110-XX-314-41-105000							
16	20,3	7,62	10,1	25	110-XX-316-41-105000							
18	22,8	7,62	10,1	22	110-XX-318-41-105000							
20	25,3	7,62	10,1	20	110-XX-320-41-105000							
22	27,8	7,62	10,1	18	110-XX-322-41-105000							
24	30,4	7,62	10,1	16	110-XX-324-41-105000							
28	35,5	7,62	10,1	14	110-XX-328-41-105000							
20	25,4	10,16	12,7	20	110-XX-420-41-105000							
22	27,8	10,16	12,7	18	110-XX-422-41-105000							
24	30,4	10,16	12,7	16	110-XX-424-41-105000							
28	35,5	10,16	12,7	14	110-XX-428-41-105000							
32	40,6	10,16	12,7	12	110-XX-432-41-105000							
24	30,4	15,24	17,7	16	110-XX-624-41-105000							
28	35,5	15,24	17,7	14	110-XX-628-41-105000							
32	40,6	15,24	17,7	12	110-XX-632-41-105000							
36	45,7	15,24	17,7	11	110-XX-636-41-105000							
40	50,8	15,24	17,7	10	110-XX-640-41-105000							
42	53,3	15,24	17,7	9	110-XX-642-41-105000							
48	60,9	15,24	17,7	8	110-XX-648-41-105000							
50	63,5	15,24	17,7	8	110-XX-650-41-105000							
52	66,0	15,24	17,7	7	110-XX-652-41-105000							
50	63,5	22,86	25,3	8	110-XX-950-41-105000							
52	66,0	22,86	25,3	7	110-XX-952-41-105000							
64	81,2	22,86	25,3	6	110-XX-964-41-105000							
See page 264 for coplanarity information					<b>SPECIFY PLATING CODE XX=</b>		91	93			43	47
					Sleeve (Pin)		5,08µm Sn/Pb	5,08µm Sn/Pb			5,08µm Sn	5,08µm Sn
					Contact (Clip)		0,25µm Au	0,76µm Au			0,76µm Au	Au Flash

XX=Plating Code  
See Below

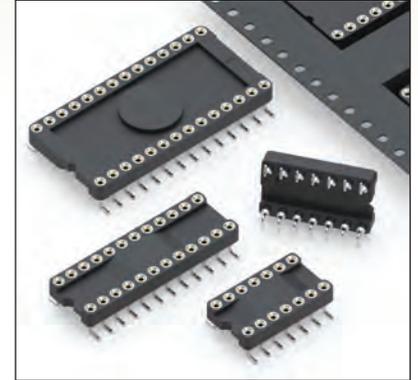


# DUAL-IN-LINE SOCKETS

## SERIES 210...105 • SMT, AUTO PLACEMENT, GULL WING • CLOSED FRAME



- Closed frame insulator is vision system compatible
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints. Series 210 uses Mill-Max #1005 pins. See page 166 for details
- Available packaged in tubes or on tape & reel per EIA-481
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- High-temp Nylon 46 insulator is suitable for all forms of reflow soldering
- For Electrical, Mechanical and Environmental Data, see page 264 for details

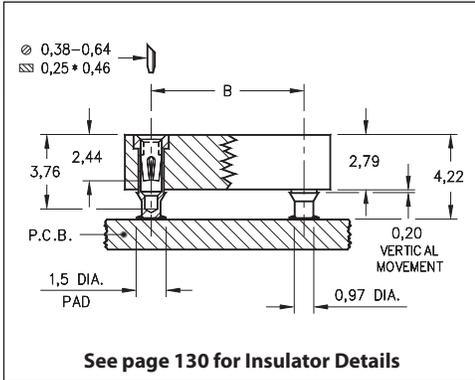


Total number of pins				Quantity per tube	ORDERING INFORMATION				
	A	B	C		Tube Packaging	Tape & Reel Packaging	Tape Width (mm)	QTY per Reel	
<b>VACUUM PAD TOP SURFACE ONLY</b>									
6	7,6	7,62	10,1	67	210-XX-306-41-105000	210-XX-306-41-105799	16	400	
8	10,1	7,62	10,1	50	210-XX-308-41-105000	210-XX-308-41-105799	24	400	
14	17,7	7,62	10,1	28	210-XX-314-41-105000	210-XX-314-41-105799	32	400	
16	20,3	7,62	10,1	25	210-XX-316-41-105000	210-XX-316-41-105799	32	400	
18	22,8	7,62	10,1	22	210-XX-318-41-105000	210-XX-318-41-105799	44	400	
20	25,3	7,62	10,1	20	210-XX-320-41-105000	210-XX-320-41-105799	44	400	
24	30,4	7,62	10,1	16	210-XX-324-41-105000	210-XX-324-41-105799	44	400	
<b>VACUUM PAD TOP AND BOTTOM</b>									
24	30,4	15,24	17,7	16	210-XX-624-41-105000	210-XX-624-41-105799	44	300	
28	35,5	15,24	17,7	14	210-XX-628-41-105000	210-XX-628-41-105799	56	300	
32	40,6	15,24	17,7	12	210-XX-632-41-105000	210-XX-632-41-105799	56	300	
40	50,8	15,24	17,7	10	210-XX-640-41-105000	NOT AVAILABLE			
See page 264 for coplanarity information					<b>SPECIFY PLATING CODE XX=</b>				
					Sleeve (Pin)		93		43
					Contact (Clip)		5,08µm Sn/Pb		5,08µm Sn
						0,76µm Au		0,76µm Au	

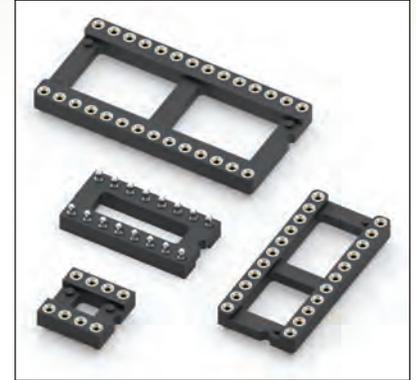


# DUAL-IN-LINE SOCKETS

## SERIES 114 • SURFACE MOUNT, STUB TAIL • OPEN FRAME



- Unique floating contacts compensate for the effects of unevenly dispensed solder paste
- Socket pins feature closed end construction eliminating any solder/flux wicking problems
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 114 uses MM #1434 pins. See page 162 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data see page 264 for details



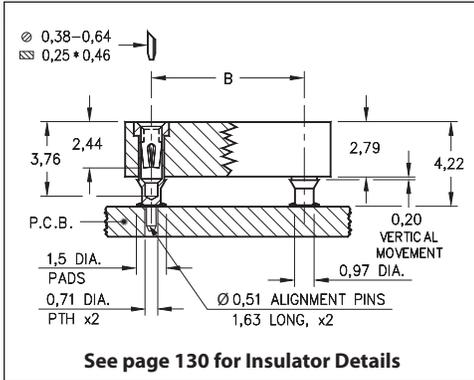
Total number of pins	Pin Spacing Diagram			Quantity per tube	ORDERING INFORMATION						
	A	B	C								
10	12,6	5,08	7,6	41	114-XX-210-41-117000						
4	5,0	7,62	10,1	100	114-XX-304-41-117000						
6	7,6	7,62	10,1	67	114-XX-306-41-117000						
8	10,1	7,62	10,1	50	114-XX-308-41-117000						
10	12,6	7,62	10,1	40	114-XX-310-41-117000						
14	17,7	7,62	10,1	28	114-XX-314-41-117000						
16	20,3	7,62	10,1	25	114-XX-316-41-117000						
18	22,8	7,62	10,1	22	114-XX-318-41-117000						
20	25,3	7,62	10,1	20	114-XX-320-41-117000						
22	27,8	7,62	10,1	18	114-XX-322-41-117000						
24	30,4	7,62	10,1	16	114-XX-324-41-117000						
28	35,5	7,62	10,1	14	114-XX-328-41-117000						
20	25,4	10,16	12,7	20	114-XX-420-41-117000						
22	27,8	10,16	12,7	18	114-XX-422-41-117000						
24	30,4	10,16	12,7	16	114-XX-424-41-117000						
28	35,5	10,16	12,7	14	114-XX-428-41-117000						
32	40,6	10,16	12,7	12	114-XX-432-41-117000						
24	30,4	15,24	17,7	16	114-XX-624-41-117000						
28	35,5	15,24	17,7	14	114-XX-628-41-117000						
32	40,6	15,24	17,7	12	114-XX-632-41-117000						
36	45,7	15,24	17,7	11	114-XX-636-41-117000						
40	50,8	15,24	17,7	10	114-XX-640-41-117000						
42	53,3	15,24	17,7	9	114-XX-642-41-117000						
48	60,9	15,24	17,7	8	114-XX-648-41-117000						
50	63,5	15,24	17,7	8	114-XX-650-41-117000						
52	66,0	15,24	17,7	7	114-XX-652-41-117000						
50	63,5	22,86	25,3	8	114-XX-950-41-117000						
52	66,0	22,86	25,3	7	114-XX-952-41-117000						
64	81,2	22,86	25,3	6	114-XX-964-41-117000						
<b>SPECIFY PLATING CODE XX =</b> Sleeve (Pin)  Contact (Clip) 					91	93	41	43	47		
					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn		
					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash		

XX=Plating Code  
See Below

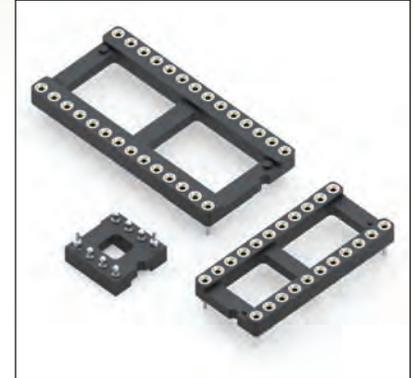


# DUAL-IN-LINE SOCKETS

## SERIES 113 • SURFACE MOUNT, STUB TAIL W/ ALIGNMENT PINS • OPEN FRAME



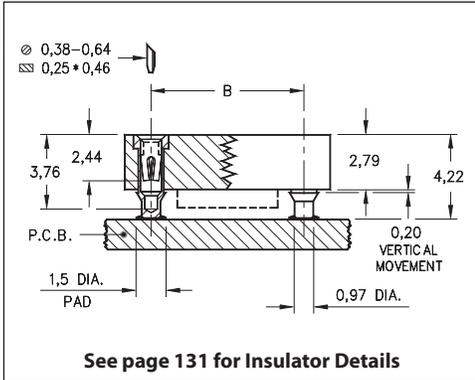
- Unique floating contacts compensate for the effects of unevenly dispensed solder paste
- Two corner alignment pins (power & ground positions) permit manual placement
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 113 uses MM #1334 and #1434 pins. See pages 162 and 171
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



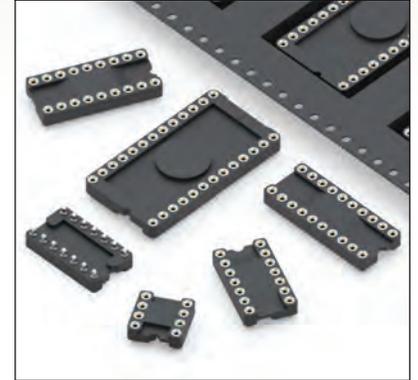
Total number of pins	ALIGNMENT PINS			Quantity per tube	ORDERING INFORMATION			
	A	B	C					
10	12,6	5,08	7,6	41	113-XX-210-41-117000			
4	5,0	7,62	10,1	100	113-XX-304-41-117000			
6	7,6	7,62	10,1	67	113-XX-306-41-117000			
8	10,1	7,62	10,1	50	113-XX-308-41-117000			
10	12,6	7,62	10,1	40	113-XX-310-41-117000			
14	17,7	7,62	10,1	28	113-XX-314-41-117000			
16	20,3	7,62	10,1	25	113-XX-316-41-117000			
18	22,8	7,62	10,1	22	113-XX-318-41-117000			
20	25,3	7,62	10,1	20	113-XX-320-41-117000			
22	27,8	7,62	10,1	18	113-XX-322-41-117000			
24	30,4	7,62	10,1	16	113-XX-324-41-117000			
28	35,5	7,62	10,1	14	113-XX-328-41-117000			
20	25,4	10,16	12,7	20	113-XX-420-41-117000			
22	27,8	10,16	12,7	18	113-XX-422-41-117000			
24	30,4	10,16	12,7	16	113-XX-424-41-117000			
28	35,5	10,16	12,7	14	113-XX-428-41-117000			
32	40,6	10,16	12,7	12	113-XX-432-41-117000			
24	30,4	15,24	17,7	16	113-XX-624-41-117000			
28	35,5	15,24	17,7	14	113-XX-628-41-117000			
32	40,6	15,24	17,7	12	113-XX-632-41-117000			
36	45,7	15,24	17,7	11	113-XX-636-41-117000			
40	50,8	15,24	17,7	10	113-XX-640-41-117000			
42	53,3	15,24	17,7	9	113-XX-642-41-117000			
48	60,9	15,24	17,7	8	113-XX-648-41-117000			
50	63,5	15,24	17,7	8	113-XX-650-41-117000			
52	66,0	15,24	17,7	7	113-XX-652-41-117000			
50	63,5	22,86	25,3	8	XX=Plating Code See Below	113-XX-950-41-117000		RoHS-2 2011/65/EU
52	66,0	22,86	25,3	7		113-XX-952-41-117000		
64	81,2	22,86	25,3	6		113-XX-964-41-117000		
<b>SPECIFY PLATING CODE XX =</b>						93		43
Sleeve (Pin)						5,08µm Sn/Pb		5,08µm Sn
Contact (Clip)						0,25µm Au		0,25µm Au

# DUAL-IN-LINE SOCKETS

## SERIES 214 • SURFACE MOUNT, AUTO PLACEMENT, STUB TAIL • CLOSED FRAME



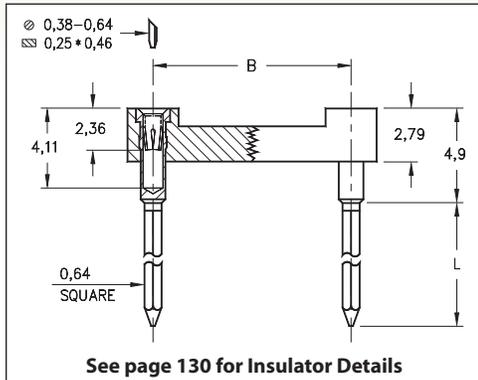
- Unique floating contacts compensate for the effects of unevenly screened solder paste
- Available packaged in tubes or on tape & reel per EIA-481
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 214 uses MM #1434 pins. See page 162 for details
- High temp. Nylon 46 insulator is suitable for all surface mount soldering processes. Closed frame insulator is vision system compatible
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION						
	A	B	C		Tube Packaging	Tape & Reel Packaging	Tape Width (mm)	QTY per Reel			
<b>VACUUM PAD TOP SURFACE ONLY</b>											
6	7,6	7,62	10,1	67	214-XX-306-01-670800	214-XX-306-01-670799	16	750			
8	10,1	7,62	10,1	50	214-XX-308-01-670800	214-XX-308-01-670799	16	1000			
14	17,7	7,62	10,1	28	214-XX-314-01-670800	214-XX-314-01-670799	32	750			
16	20,3	7,62	10,1	25	214-XX-316-01-670800	214-XX-316-01-670799	32	750			
18	22,8	7,62	10,1	22	214-XX-318-01-670800	214-XX-318-01-670799	44	750			
20	25,3	7,62	10,1	20	214-XX-320-01-670800	214-XX-320-01-670799	44	750			
<b>VACUUM PAD TOP AND BOTTOM</b>											
24	30,4	15,24	17,7	16	214-XX-624-01-670800	214-XX-624-01-670799	44	400			
28	35,5	15,24	17,7	14	214-XX-628-01-670800	214-XX-628-01-670799	56	400			
32	40,6	15,24	17,7	12	214-XX-632-01-670800	214-XX-632-01-670799	56	400			
40	50,8	15,24	17,7	10	214-XX-640-01-670800	NOT AVAILABLE					
<b>SPECIFY PLATING CODE XX =</b>								99			44
Sleeve (Pin)								5,08µm Sn/Pb			5,08µm Sn
Contact (Clip)								2,54µm Sn/Pb			2,54µm Sn

# DUAL-IN-LINE SOCKETS

## SERIES 121, 122, 123, 124 • 1 - 4 LEVEL WRAPOST • OPEN FRAME



- Solderless wrappost terminals are firmly locked in the insulator body to withstand torque of a wrapping tool
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 121, 122, 123 and 124 use MM #0040, #0086, #0088 and #0089 pins. See page 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

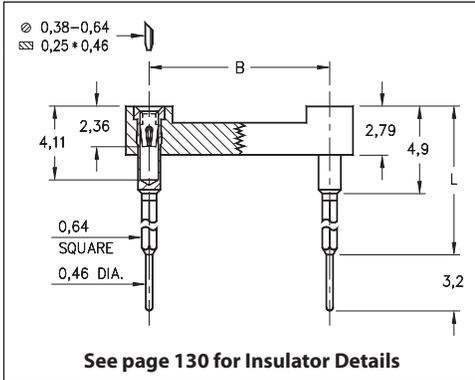


Total number of pins				Quantity per tube	ORDERING INFORMATION						
	A	B	C		L = 6,6 (1 Level Wrappost)	L = 9,4 (2 Level Wrappost)	L = 12,95 (3 Level Wrappost)	L = 16,0 (4 Level Wrappost)			
10	12,6	5,08	7,6	40	121-XX-210-41-001000	122-XX-210-41-001000	123-XX-210-41-001000	124-XX-210-41-002000 43 or 93 Plating Code ONLY			
4	5,0	7,62	10,1	102	121-XX-304-41-001000	122-XX-304-41-001000	123-XX-304-41-001000	124-XX-304-41-002000			
6	7,6	7,62	10,1	67	121-XX-306-41-001000	122-XX-306-41-001000	123-XX-306-41-001000	124-XX-306-41-002000			
8	10,1	7,62	10,1	50	121-XX-308-41-001000	122-XX-308-41-001000	123-XX-308-41-001000	124-XX-308-41-002000			
10	12,6	7,62	10,1	40	121-XX-310-41-001000	122-XX-310-41-001000	123-XX-310-41-001000	124-XX-310-41-002000			
14	17,7	7,62	10,1	28	121-XX-314-41-001000	122-XX-314-41-001000	123-XX-314-41-001000	124-XX-314-41-002000			
16	20,3	7,62	10,1	25	121-XX-316-41-001000	122-XX-316-41-001000	123-XX-316-41-001000	124-XX-316-41-002000			
18	22,8	7,62	10,1	22	121-XX-318-41-001000	122-XX-318-41-001000	123-XX-318-41-001000	124-XX-318-41-002000			
20	25,3	7,62	10,1	20	121-XX-320-41-001000	122-XX-320-41-001000	123-XX-320-41-001000	124-XX-320-41-002000			
22	27,8	7,62	10,1	18	121-XX-322-41-001000	122-XX-322-41-001000	123-XX-322-41-001000	124-XX-322-41-002000			
24	30,4	7,62	10,1	16	121-XX-324-41-001000	122-XX-324-41-001000	123-XX-324-41-001000	124-XX-324-41-002000			
28	35,5	7,62	10,1	14	121-XX-328-41-001000	122-XX-328-41-001000	123-XX-328-41-001000	124-XX-328-41-002000 43 or 93 Plating Code ONLY			
20	25,4	10,16	12,7	20	121-XX-420-41-001000	122-XX-420-41-001000	123-XX-420-41-001000	124-XX-420-41-002000			
22	27,8	10,16	12,7	18	121-XX-422-41-001000	122-XX-422-41-001000	123-XX-422-41-001000	124-XX-422-41-002000			
24	30,4	10,16	12,7	16	121-XX-424-41-001000	122-XX-424-41-001000	123-XX-424-41-001000	124-XX-424-41-002000			
28	35,5	10,16	12,7	14	121-XX-428-41-001000	122-XX-428-41-001000	123-XX-428-41-001000	124-XX-428-41-002000			
32	40,6	10,16	12,7	12	121-XX-432-41-001000	122-XX-432-41-001000	123-XX-432-41-001000	124-XX-432-41-002000 43 or 93 Plating Code ONLY			
24	30,4	15,24	17,7	16	121-XX-624-41-001000	122-XX-624-41-001000	123-XX-624-41-001000	124-XX-624-41-002000			
28	35,5	15,24	17,7	14	121-XX-628-41-001000	122-XX-628-41-001000	123-XX-628-41-001000	124-XX-628-41-002000			
32	40,6	15,24	17,7	12	121-XX-632-41-001000	122-XX-632-41-001000	123-XX-632-41-001000	124-XX-632-41-002000			
36	45,7	15,24	17,7	11	121-XX-636-41-001000	122-XX-636-41-001000	123-XX-636-41-001000	124-XX-636-41-002000			
40	50,8	15,24	17,7	10	121-XX-640-41-001000	122-XX-640-41-001000	123-XX-640-41-001000	124-XX-640-41-002000			
42	53,3	15,24	17,7	9	121-XX-642-41-001000	122-XX-642-41-001000	123-XX-642-41-001000	124-XX-642-41-002000			
48	60,9	15,24	17,7	8	121-XX-648-41-001000	122-XX-648-41-001000	123-XX-648-41-001000	124-XX-648-41-002000			
50	63,5	15,24	17,7	8	121-XX-650-41-001000	122-XX-650-41-001000	123-XX-650-41-001000	124-XX-650-41-002000			
52	66,0	15,24	17,7	7	121-XX-652-41-001000	122-XX-652-41-001000	123-XX-652-41-001000	124-XX-652-41-002000 43 or 93 Plating Code ONLY			
50	63,5	22,86	25,3	8	121-XX-950-41-001000	122-XX-950-41-001000	123-XX-950-41-001000	124-XX-950-41-002000			
52	66,0	22,86	25,3	7	121-XX-952-41-001000	122-XX-952-41-001000	123-XX-952-41-001000	124-XX-952-41-002000			
64	81,2	22,86	25,3	6	121-XX-964-41-001000	122-XX-964-41-001000	123-XX-964-41-001000	124-XX-964-41-002000			
SPECIFY PLATING CODE XX =					13	91	93	41	43	47	
Sleeve (Pin)					0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	
Contact (Clip)					0,76µm Au	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash	



# DUAL-IN-LINE SOCKETS

## SERIES 126 • PLUGGABLE WRAPOST • OPEN FRAME



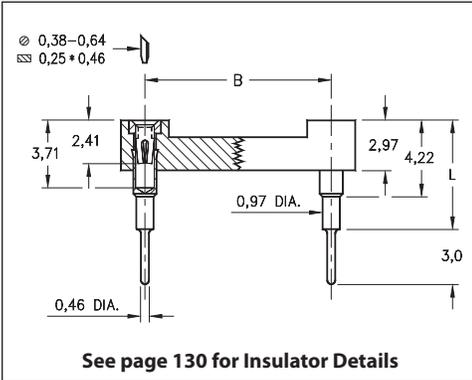
- Combines one through three level wrappost with pluggable solder tails
- Suitable for use as an interconnect socket with intermediate wire wrapped connections
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 126 uses MM #2601, #2602 and #2603 pins. See page 199 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



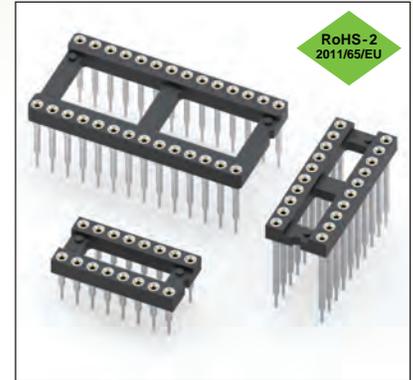
Total number of pins				Quantity per tube	ORDERING INFORMATION				
	A	B	C		L = 10,8 (1 Level Wrappost = 5,89)	L = 13,79 (2 Level Wrappost = 8,89)	L = 16,79 (3 Level Wrappost = 11,9)		
10	12,6	5,08	7,6	40	126-XX-210-41-001000	126-XX-210-41-002000	126-XX-210-41-003000		
4	5,0	7,62	10,1	102	126-XX-304-41-001000	126-XX-304-41-002000	126-XX-304-41-003000		
6	7,6	7,62	10,1	67	126-XX-306-41-001000	126-XX-306-41-002000	126-XX-306-41-003000		
8	10,1	7,62	10,1	50	126-XX-308-41-001000	126-XX-308-41-002000	126-XX-308-41-003000		
10	12,6	7,62	10,1	40	126-XX-310-41-001000	126-XX-310-41-002000	126-XX-310-41-003000		
14	17,7	7,62	10,1	28	126-XX-314-41-001000	126-XX-314-41-002000	126-XX-314-41-003000		
16	20,3	7,62	10,1	25	126-XX-316-41-001000	126-XX-316-41-002000	126-XX-316-41-003000		
18	22,8	7,62	10,1	22	126-XX-318-41-001000	126-XX-318-41-002000	126-XX-318-41-003000		
20	25,3	7,62	10,1	20	126-XX-320-41-001000	126-XX-320-41-002000	126-XX-320-41-003000		
22	27,8	7,62	10,1	18	126-XX-322-41-001000	126-XX-322-41-002000	126-XX-322-41-003000		
24	30,4	7,62	10,1	16	126-XX-324-41-001000	126-XX-324-41-002000	126-XX-324-41-003000		
28	35,5	7,62	10,1	14	126-XX-328-41-001000	126-XX-328-41-002000	126-XX-328-41-003000		
20	25,4	10,16	12,7	20	126-XX-420-41-001000	126-XX-420-41-002000	126-XX-420-41-003000		
22	27,8	10,16	12,7	18	126-XX-422-41-001000	126-XX-422-41-002000	126-XX-422-41-003000		
24	30,4	10,16	12,7	16	126-XX-424-41-001000	126-XX-424-41-002000	126-XX-424-41-003000		
28	35,5	10,16	12,7	14	126-XX-428-41-001000	126-XX-428-41-002000	126-XX-428-41-003000		
32	40,6	10,16	12,7	12	126-XX-432-41-001000	126-XX-432-41-002000	126-XX-432-41-003000		
24	30,4	15,24	17,7	16	126-XX-624-41-001000	126-XX-624-41-002000	126-XX-624-41-003000		
28	35,5	15,24	17,7	14	126-XX-628-41-001000	126-XX-628-41-002000	126-XX-628-41-003000		
32	40,6	15,24	17,7	12	126-XX-632-41-001000	126-XX-632-41-002000	126-XX-632-41-003000		
36	45,7	15,24	17,7	11	126-XX-636-41-001000	126-XX-636-41-002000	126-XX-636-41-003000		
40	50,8	15,24	17,7	10	126-XX-640-41-001000	126-XX-640-41-002000	126-XX-640-41-003000		
42	53,3	15,24	17,7	9	126-XX-642-41-001000	126-XX-642-41-002000	126-XX-642-41-003000		
48	60,9	15,24	17,7	8	126-XX-648-41-001000	126-XX-648-41-002000	126-XX-648-41-003000		
50	63,5	15,24	17,7	8	126-XX-650-41-001000	126-XX-650-41-002000	126-XX-650-41-003000		
52	66,0	15,24	17,7	7	126-XX-652-41-001000	126-XX-652-41-002000	126-XX-652-41-003000		
50	63,5	22,86	25,3	8	126-XX-950-41-001000	126-XX-950-41-002000	126-XX-950-41-003000		
52	66,0	22,86	25,3	7	126-XX-952-41-001000	126-XX-952-41-002000	126-XX-952-41-003000		
64	81,2	22,86	25,3	6	126-XX-964-41-001000	126-XX-964-41-002000	126-XX-964-41-003000		
<b>SPECIFY PLATING CODE XX =</b>					91	93	41 ◆	43 ◆	 <b>XX=Plating Code See to Left</b>
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	

# DUAL-IN-LINE SOCKETS

## SERIES 116 • ELEVATED • OPEN FRAME



- Ideal for raised component requirements and stacking of PCBs
- Sockets are XY stackable
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 116 uses MM #0153-X pins. See page 167 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

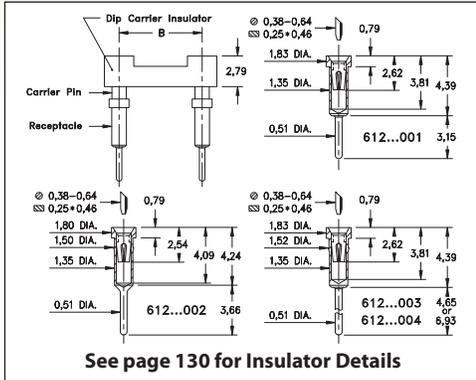


Total number of pins	Pin Spacing			Quantity per tube	ORDERING INFORMATION					
					L = 6,0	L = 8,0	L = 10,21	L = 11,99	L = 15,09	
	A	B	C		(#0153-1 pin)	(#0153-2 pin)	(#0153-3 pin)	(#0153-4 pin)	(#0153-5 pin)	
10	12,6	5,08	7,6	40	116-XX-210-41-006000	116-XX-210-41-003000	116-XX-210-41-007000	116-XX-210-41-008000	116-XX-210-41-001000	
4	5,0	7,62	10,1	102	116-XX-304-41-006000	116-XX-304-41-003000	116-XX-304-41-007000	116-XX-304-41-008000	116-XX-304-41-001000	
6	7,6	7,62	10,1	67	116-XX-306-41-006000	116-XX-306-41-003000	116-XX-306-41-007000	116-XX-306-41-008000	116-XX-306-41-001000	
8	10,1	7,62	10,1	50	116-XX-308-41-006000	116-XX-308-41-003000	116-XX-308-41-007000	116-XX-308-41-008000	116-XX-308-41-001000	
10	12,6	7,62	10,1	40	116-XX-310-41-006000	116-XX-310-41-003000	116-XX-310-41-007000	116-XX-310-41-008000	116-XX-310-41-001000	
14	17,7	7,62	10,1	28	116-XX-314-41-006000	116-XX-314-41-003000	116-XX-314-41-007000	116-XX-314-41-008000	116-XX-314-41-001000	
16	20,3	7,62	10,1	25	116-XX-316-41-006000	116-XX-316-41-003000	116-XX-316-41-007000	116-XX-316-41-008000	116-XX-316-41-001000	
18	22,8	7,62	10,1	22	116-XX-318-41-006000	116-XX-318-41-003000	116-XX-318-41-007000	116-XX-318-41-008000	116-XX-318-41-001000	
20	25,3	7,62	10,1	20	116-XX-320-41-006000	116-XX-320-41-003000	116-XX-320-41-007000	116-XX-320-41-008000	116-XX-320-41-001000	
22	27,8	7,62	10,1	18	116-XX-322-41-006000	116-XX-322-41-003000	116-XX-322-41-007000	116-XX-322-41-008000	116-XX-322-41-001000	
24	30,4	7,62	10,1	16	116-XX-324-41-006000	116-XX-324-41-003000	116-XX-324-41-007000	116-XX-324-41-008000	116-XX-324-41-001000	
28	35,5	7,62	10,1	14	116-XX-328-41-006000	116-XX-328-41-003000	116-XX-328-41-007000	116-XX-328-41-008000	116-XX-328-41-001000	
20	25,4	10,16	12,7	20	116-XX-420-41-006000	116-XX-420-41-003000	116-XX-420-41-007000	116-XX-420-41-008000	116-XX-420-41-001000	
22	27,8	10,16	12,7	18	116-XX-422-41-006000	116-XX-422-41-003000	116-XX-422-41-007000	116-XX-422-41-008000	116-XX-422-41-001000	
24	30,4	10,16	12,7	16	116-XX-424-41-006000	116-XX-424-41-003000	116-XX-424-41-007000	116-XX-424-41-008000	116-XX-424-41-001000	
28	35,5	10,16	12,7	14	116-XX-428-41-006000	116-XX-428-41-003000	116-XX-428-41-007000	116-XX-428-41-008000	116-XX-428-41-001000	
32	40,6	10,16	12,7	12	116-XX-432-41-006000	116-XX-432-41-003000	116-XX-432-41-007000	116-XX-432-41-008000	116-XX-432-41-001000	
24	30,4	15,24	17,7	16	116-XX-624-41-006000	116-XX-624-41-003000	116-XX-624-41-007000	116-XX-624-41-008000	116-XX-624-41-001000	
28	35,5	15,24	17,7	14	116-XX-628-41-006000	116-XX-628-41-003000	116-XX-628-41-007000	116-XX-628-41-008000	116-XX-628-41-001000	
32	40,6	15,24	17,7	12	116-XX-632-41-006000	116-XX-632-41-003000	116-XX-632-41-007000	116-XX-632-41-008000	116-XX-632-41-001000	
36	45,7	15,24	17,7	11	116-XX-636-41-006000	116-XX-636-41-003000	116-XX-636-41-007000	116-XX-636-41-008000	116-XX-636-41-001000	
40	50,8	15,24	17,7	10	116-XX-640-41-006000	116-XX-640-41-003000	116-XX-640-41-007000	116-XX-640-41-008000	116-XX-640-41-001000	
42	53,3	15,24	17,7	9	116-XX-642-41-006000	116-XX-642-41-003000	116-XX-642-41-007000	116-XX-642-41-008000	116-XX-642-41-001000	
48	60,9	15,24	17,7	8	116-XX-648-41-006000	116-XX-648-41-003000	116-XX-648-41-007000	116-XX-648-41-008000	116-XX-648-41-001000	
50	63,5	15,24	17,7	8	116-XX-650-41-006000	116-XX-650-41-003000	116-XX-650-41-007000	116-XX-650-41-008000	116-XX-650-41-001000	
52	66,0	15,24	17,7	7	116-XX-652-41-006000	116-XX-652-41-003000	116-XX-652-41-007000	116-XX-652-41-008000	116-XX-652-41-001000	
50	63,5	22,86	25,3	8	116-XX-950-41-006000	116-XX-950-41-003000	116-XX-950-41-007000	116-XX-950-41-008000	116-XX-950-41-001000	
52	66,0	22,86	25,3	7	116-XX-952-41-006000	116-XX-952-41-003000	116-XX-952-41-007000	116-XX-952-41-008000	116-XX-952-41-001000	
64	81,2	22,86	25,3	6	116-XX-964-41-006000	116-XX-964-41-003000	116-XX-964-41-007000	116-XX-964-41-008000	116-XX-964-41-001000	
<b>SPECIFY PLATING CODE XX=</b>					91	93	41 ◆	43 ◆	47 ◆	
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn	
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash	



# DUAL-IN-LINE SOCKETS

## SERIES 612 • CARRIER TYPE, SOLDER TAIL • OPEN FRAME



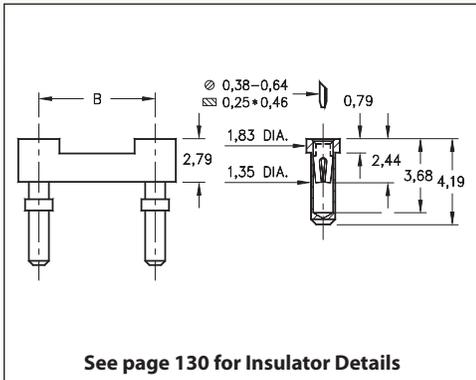
- Convenient way to load loose receptacles on a PC board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 612 uses MM #0255, #8855, #0135 or #0132 pins. See pages 165 and 171 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION					
	A	B	C		Tail Length = 3,15 (0,56 Min. Mounting Hole)	Tail Length = 3,66 (0,56 Min. Mounting Hole)	Tail Length = 4,65 (0,56 Min. Mounting Hole)	Tail Length = 6,93 (0,56 Min. Mounting Hole)		
					13 ◆	91	93	41 ◆	43 ◆	
10	12,6	5,08	7,6	40	612-XX-210-41-001000	612-XX-210-41-002000	612-XX-210-41-003000	612-XX-210-41-004000		
4	5,0	7,62	10,1	102	612-XX-304-41-001000	612-XX-304-41-002000	612-XX-304-41-003000	612-XX-304-41-004000		
6	7,6	7,62	10,1	68	612-XX-306-41-001000	612-XX-306-41-002000	612-XX-306-41-003000	612-XX-306-41-004000		
8	10,1	7,62	10,1	50	612-XX-308-41-001000	612-XX-308-41-002000	612-XX-308-41-003000	612-XX-308-41-004000		
10	12,6	7,62	10,1	40	612-XX-310-41-001000	612-XX-310-41-002000	612-XX-310-41-003000	612-XX-310-41-004000		
14	17,7	7,62	10,1	28	612-XX-314-41-001000	612-XX-314-41-002000	612-XX-314-41-003000	612-XX-314-41-004000		
16	20,3	7,62	10,1	25	612-XX-316-41-001000	612-XX-316-41-002000	612-XX-316-41-003000	612-XX-316-41-004000		
18	22,8	7,62	10,1	22	612-XX-318-41-001000	612-XX-318-41-002000	612-XX-318-41-003000	612-XX-318-41-004000		
20	25,3	7,62	10,1	20	612-XX-320-41-001000	612-XX-320-41-002000	612-XX-320-41-003000	612-XX-320-41-004000		
22	27,8	7,62	10,1	18	612-XX-322-41-001000	612-XX-322-41-002000	612-XX-322-41-003000	612-XX-322-41-004000		
24	30,4	7,62	10,1	16	612-XX-324-41-001000	612-XX-324-41-002000	612-XX-324-41-003000	612-XX-324-41-004000		
28	35,5	7,62	10,1	14	612-XX-328-41-001000	612-XX-328-41-002000	612-XX-328-41-003000	612-XX-328-41-004000		
20	25,4	10,16	12,7	20	612-XX-420-41-001000	612-XX-420-41-002000	612-XX-420-41-003000	612-XX-420-41-004000		
22	27,8	10,16	12,7	18	612-XX-422-41-001000	612-XX-422-41-002000	612-XX-422-41-003000	612-XX-422-41-004000		
24	30,4	10,16	12,7	16	612-XX-424-41-001000	612-XX-424-41-002000	612-XX-424-41-003000	612-XX-424-41-004000		
28	35,5	10,16	12,7	14	612-XX-428-41-001000	612-XX-428-41-002000	612-XX-428-41-003000	612-XX-428-41-004000		
32	40,6	10,16	12,7	12	612-XX-432-41-001000	612-XX-432-41-002000	612-XX-432-41-003000	612-XX-432-41-004000		
24	30,4	15,24	17,7	16	612-XX-624-41-001000	612-XX-624-41-002000	612-XX-624-41-003000	612-XX-624-41-004000		
28	35,5	15,24	17,7	14	612-XX-628-41-001000	612-XX-628-41-002000	612-XX-628-41-003000	612-XX-628-41-004000		
32	40,6	15,24	17,7	12	612-XX-632-41-001000	612-XX-632-41-002000	612-XX-632-41-003000	612-XX-632-41-004000		
36	45,7	15,24	17,7	11	612-XX-636-41-001000	612-XX-636-41-002000	612-XX-636-41-003000	612-XX-636-41-004000		
40	50,8	15,24	17,7	10	612-XX-640-41-001000	612-XX-640-41-002000	612-XX-640-41-003000	612-XX-640-41-004000		
42	53,3	15,24	17,7	9	612-XX-642-41-001000	612-XX-642-41-002000	612-XX-642-41-003000	612-XX-642-41-004000		
48	60,9	15,24	17,7	8	612-XX-648-41-001000	612-XX-648-41-002000	612-XX-648-41-003000	612-XX-648-41-004000		
50	63,5	15,24	17,7	8	612-XX-650-41-001000	612-XX-650-41-002000	612-XX-650-41-003000	612-XX-650-41-004000		
52	66,0	15,24	17,7	7	612-XX-652-41-001000	612-XX-652-41-002000	612-XX-652-41-003000	612-XX-652-41-004000		
50	63,5	22,86	25,3	8	612-XX-950-41-001000	612-XX-950-41-002000	612-XX-950-41-003000	612-XX-950-41-004000		
52	66,0	22,86	25,3	7	612-XX-952-41-001000	612-XX-952-41-002000	612-XX-952-41-003000	612-XX-952-41-004000		
64	81,2	22,86	25,3	6	612-XX-964-41-001000	612-XX-964-41-002000	612-XX-964-41-003000	612-XX-964-41-004000		
<b>SPECIFY PLATING CODE XX =</b>					13 ◆	91	93	41 ◆	43 ◆	<b>XX=Plating Code See to Left</b>
Sleeve (Pin)					0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	
Contact (Clip)					0,76µm Au	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	

# DUAL-IN-LINE SOCKETS

## SERIES 614...001 • CARRIER TYPE, LOW PROFILE • OPEN FRAME



- Convenient way to load loose receptacles on a PC board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 614 uses MM #1401 pins. See page 170 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



## ORDERING INFORMATION

Total number of pins	Pin Pitch			Quantity per tube	Part Number
	A	B	C		
10	12,6	5,08	7,6	40	614-XX-210-41-001000
4	5,0	7,62	10,1	102	614-XX-304-41-001000
6	7,6	7,62	10,1	67	614-XX-306-41-001000
8	10,1	7,62	10,1	50	614-XX-308-41-001000
10	12,6	7,62	10,1	40	614-XX-310-41-001000
14	17,7	7,62	10,1	28	614-XX-314-41-001000
16	20,3	7,62	10,1	25	614-XX-316-41-001000
18	22,8	7,62	10,1	22	614-XX-318-41-001000
20	25,3	7,62	10,1	20	614-XX-320-41-001000
22	27,8	7,62	10,1	18	614-XX-322-41-001000
24	30,4	7,62	10,1	16	614-XX-324-41-001000
28	35,5	7,62	10,1	14	614-XX-328-41-001000
20	25,4	10,16	12,7	20	614-XX-420-41-001000
22	27,8	10,16	12,7	18	614-XX-422-41-001000
24	30,4	10,16	12,7	16	614-XX-424-41-001000
28	35,5	10,16	12,7	14	614-XX-428-41-001000
32	40,6	10,16	12,7	12	614-XX-432-41-001000
24	30,4	15,24	17,7	16	614-XX-624-41-001000
28	35,5	15,24	17,7	14	614-XX-628-41-001000
32	40,6	15,24	17,7	12	614-XX-632-41-001000
36	45,7	15,24	17,7	11	614-XX-636-41-001000
40	50,8	15,24	17,7	10	614-XX-640-41-001000
42	53,3	15,24	17,7	9	614-XX-642-41-001000
48	60,9	15,24	17,7	8	614-XX-648-41-001000
50	63,5	15,24	17,7	8	614-XX-650-41-001000
52	66,0	15,24	17,7	7	614-XX-652-41-001000
50	63,5	22,86	25,3	8	614-XX-950-41-001000
52	66,0	22,86	25,3	7	614-XX-952-41-001000
64	81,2	22,86	25,3	6	614-XX-964-41-001000

XX=Plating Code  
See Below

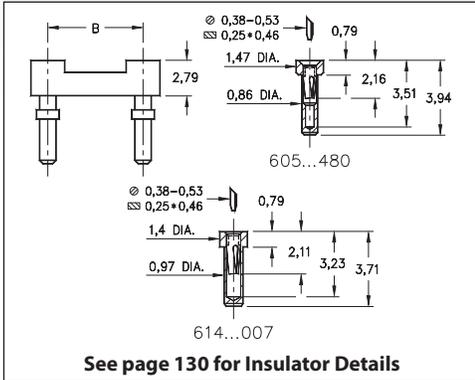


SPECIFY PLATING CODE XX =		91	93	41	43
Sleeve (Pin)		5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)		0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au



# DUAL-IN-LINE SOCKETS

## SERIES 605, 614 • CARRIER TYPE, LOW PROFILE • OPEN FRAME



- Low profile receptacles sit only 0,79 high above the board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Series 605 and 614 use MM #1407 & #0548 pins. See page 157 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION			
	A	B	C		Length = 3,71 (0,99 Min. Mounting Hole)	Length = 3,94 (0,89 Min. Mounting Hole)		
10	12,6	5,08	7,6	40	614-XX-210-31-007000	605-XX-210-11-480000		
4	5,0	7,62	10,1	102	614-XX-304-31-007000	605-XX-304-11-480000		
6	7,6	7,62	10,1	68	614-XX-306-31-007000	605-XX-306-11-480000		
8	10,1	7,62	10,1	50	614-XX-308-31-007000	605-XX-308-11-480000		
10	12,6	7,62	10,1	40	614-XX-310-31-007000	605-XX-310-11-480000		
14	17,7	7,62	10,1	28	614-XX-314-31-007000	605-XX-314-11-480000		
16	20,3	7,62	10,1	25	614-XX-316-31-007000	605-XX-316-11-480000		
18	22,8	7,62	10,1	22	614-XX-318-31-007000	605-XX-318-11-480000		
20	25,3	7,62	10,1	20	614-XX-320-31-007000	605-XX-320-11-480000		
22	27,8	7,62	10,1	18	614-XX-322-31-007000	605-XX-322-11-480000		
24	30,4	7,62	10,1	16	614-XX-324-31-007000	605-XX-324-11-480000		
28	35,5	7,62	10,1	14	614-XX-328-31-007000	605-XX-328-11-480000		
20	25,4	10,16	12,7	20	614-XX-420-31-007000	605-XX-420-11-480000		
22	27,8	10,16	12,7	18	614-XX-422-31-007000	605-XX-422-11-480000		
24	30,4	10,16	12,7	16	614-XX-424-31-007000	605-XX-424-11-480000		
28	35,5	10,16	12,7	14	614-XX-428-31-007000	605-XX-428-11-480000		
32	40,6	10,16	12,7	12	614-XX-432-31-007000	605-XX-432-11-480000		
24	30,4	15,24	17,7	16	614-XX-624-31-007000	605-XX-624-11-480000		
28	35,5	15,24	17,7	14	614-XX-628-31-007000	605-XX-628-11-480000		
32	40,6	15,24	17,7	12	614-XX-632-31-007000	605-XX-632-11-480000		
36	45,7	15,24	17,7	11	614-XX-636-31-007000	605-XX-636-11-480000		
40	50,8	15,24	17,7	10	614-XX-640-31-007000	605-XX-640-11-480000		
42	53,3	15,24	17,7	9	614-XX-642-31-007000	605-XX-642-11-480000		
48	60,9	15,24	17,7	8	614-XX-648-31-007000	605-XX-648-11-480000		
50	63,5	15,24	17,7	8	614-XX-650-31-007000	605-XX-650-11-480000		
52	66,0	15,24	17,7	7	614-XX-652-31-007000	605-XX-652-11-480000		
50	63,5	22,86	25,3	8	614-XX-950-31-007000	605-XX-950-11-480000		
52	66,0	22,86	25,3	7	614-XX-952-31-007000	605-XX-952-11-480000		
64	81,2	22,86	25,3	6	614-XX-964-31-007000	605-XX-964-11-480000		
<b>SPECIFY PLATING CODE XX =</b>					91	93	41 ◆	43 ◆
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au

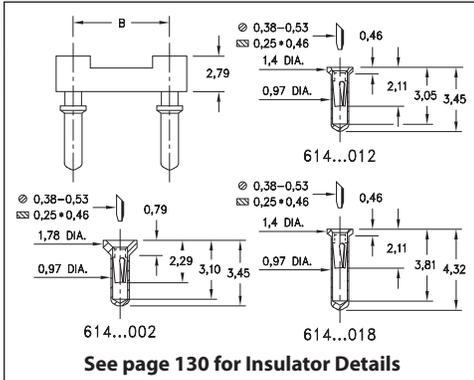


**XX=Plating Code  
See Below**

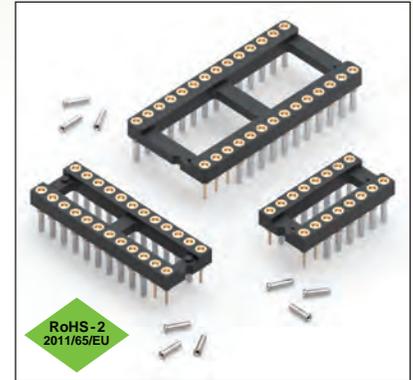


# DUAL-IN-LINE SOCKETS

## SERIES 614 • CARRIER TYPE, ULTRA LOW PROFILE • OPEN FRAME



- Ultra low profile receptacles sit only 0,46 to 0,79 high above the board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Series 614 uses MM #0552-1, #0442-0, #0552-2 pins. See pages 157 and 158 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

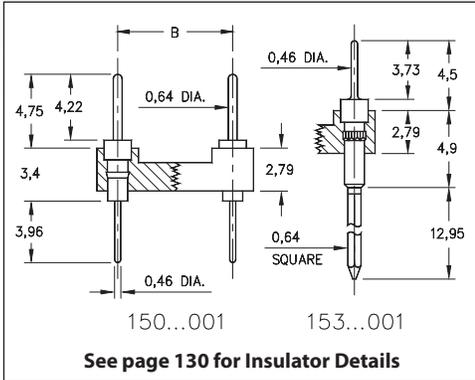


Total number of pins				Quantity per tube	ORDERING INFORMATION				
	A	B	C		Length = 3,45 (1,0 Min. Mounting Hole)	Length = 3,45 (1,0 Min. Mounting Hole)	Length = 4,32 (1,0 Min. Mounting Hole)		
10	12,6	5,08	7,6	40	614-XX-210-31-012000	614-XX-210-31-002000	614-XX-210-31-018000		
4	5,0	7,62	10,1	102	614-XX-304-31-012000	614-XX-304-31-002000	614-XX-304-31-018000		
6	7,6	7,62	10,1	67	614-XX-306-31-012000	614-XX-306-31-002000	614-XX-306-31-018000		
8	10,1	7,62	10,1	50	614-XX-308-31-012000	614-XX-308-31-002000	614-XX-308-31-018000		
10	12,6	7,62	10,1	40	614-XX-310-31-012000	614-XX-310-31-002000	614-XX-310-31-018000		
14	17,7	7,62	10,1	28	614-XX-314-31-012000	614-XX-314-31-002000	614-XX-314-31-018000		
16	20,3	7,62	10,1	25	614-XX-316-31-012000	614-XX-316-31-002000	614-XX-316-31-018000		
18	22,8	7,62	10,1	22	614-XX-318-31-012000	614-XX-318-31-002000	614-XX-318-31-018000		
20	25,3	7,62	10,1	20	614-XX-320-31-012000	614-XX-320-31-002000	614-XX-320-31-018000		
22	27,8	7,62	10,1	18	614-XX-322-31-012000	614-XX-322-31-002000	614-XX-322-31-018000		
24	30,4	7,62	10,1	16	614-XX-324-31-012000	614-XX-324-31-002000	614-XX-324-31-018000		
28	35,5	7,62	10,1	14	614-XX-328-31-012000	614-XX-328-31-002000	614-XX-328-31-018000		
20	25,4	10,16	12,7	20	614-XX-420-31-012000	614-XX-420-31-002000	614-XX-420-31-018000		
22	27,8	10,16	12,7	18	614-XX-422-31-012000	614-XX-422-31-002000	614-XX-422-31-018000		
24	30,4	10,16	12,7	16	614-XX-424-31-012000	614-XX-424-31-002000	614-XX-424-31-018000		
28	35,5	10,16	12,7	14	614-XX-428-31-012000	614-XX-428-31-002000	614-XX-428-31-018000		
32	40,6	10,16	12,7	12	614-XX-432-31-012000	614-XX-432-31-002000	614-XX-432-31-018000		
24	30,4	15,24	17,7	16	614-XX-624-31-012000	614-XX-624-31-002000	614-XX-624-31-018000		
28	35,5	15,24	17,7	14	614-XX-628-31-012000	614-XX-628-31-002000	614-XX-628-31-018000		
32	40,6	15,24	17,7	12	614-XX-632-31-012000	614-XX-632-31-002000	614-XX-632-31-018000		
36	45,7	15,24	17,7	11	614-XX-636-31-012000	614-XX-636-31-002000	614-XX-636-31-018000		
40	50,8	15,24	17,7	10	614-XX-640-31-012000	614-XX-640-31-002000	614-XX-640-31-018000		
42	53,3	15,24	17,7	9	614-XX-642-31-012000	614-XX-642-31-002000	614-XX-642-31-018000		
48	60,9	15,24	17,7	8	614-XX-648-31-012000	614-XX-648-31-002000	614-XX-648-31-018000		
50	63,5	15,24	17,7	8	614-XX-650-31-012000	614-XX-650-31-002000	614-XX-650-31-018000		
52	66,0	15,24	17,7	7	614-XX-652-31-012000	614-XX-652-31-002000	614-XX-652-31-018000		
50	63,5	22,86	25,3	8	614-XX-950-31-012000	614-XX-950-31-002000	614-XX-950-31-018000		
52	66,0	22,86	25,3	7	614-XX-952-31-012000	614-XX-952-31-002000	614-XX-952-31-018000		
64	81,2	22,86	25,3	6	614-XX-964-31-012000	614-XX-964-31-002000	614-XX-964-31-018000		
<b>SPECIFY PLATING CODE XX =</b>					91	93	41 ◆	43 ◆	
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	
Contact (Clip)					0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	

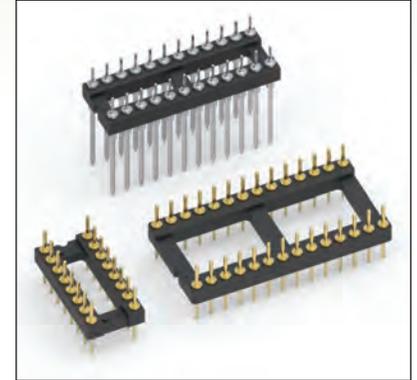


# DUAL-IN-LINE HEADERS

## SERIES 150, 153 • SOLDER TAIL AND WRAPOST • OPEN FRAME



- Series 150 DIL Headers are equipped with 0,64 dia. pins MM #0290. See page 215 for details
- Series 153 DIL Headers have 3-level wraposts MM #5301. See page 227 for details
- Both series have 0,46 dia. solder tails which are pluggable into standard contacts
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION						
	A	B	C		Solder Tail	3 Level Wrapost					
10	12,6	5,08	7,6	40	150-XX-210-00-001000	153-XX-210-00-001000					
4	5,0	7,62	10,1	102	150-XX-304-00-001000	153-XX-304-00-001000					
6	7,6	7,62	10,1	67	150-XX-306-00-001000	153-XX-306-00-001000					
8	10,1	7,62	10,1	50	150-XX-308-00-001000	153-XX-308-00-001000					
10	12,6	7,62	10,1	40	150-XX-310-00-001000	153-XX-310-00-001000					
14	17,7	7,62	10,1	29	150-XX-314-00-001000	153-XX-314-00-001000					
16	20,3	7,62	10,1	25	150-XX-316-00-001000	153-XX-316-00-001000					
18	22,8	7,62	10,1	22	150-XX-318-00-001000	153-XX-318-00-001000					
20	25,3	7,62	10,1	20	150-XX-320-00-001000	153-XX-320-00-001000					
22	27,8	7,62	10,1	18	150-XX-322-00-001000	153-XX-322-00-001000					
24	30,4	7,62	10,1	16	150-XX-324-00-001000	153-XX-324-00-001000					
28	35,5	7,62	10,1	14	150-XX-328-00-001000	153-XX-328-00-001000					
20	25,4	10,16	12,7	20	150-XX-420-00-001000	153-XX-420-00-001000					
22	27,8	10,16	12,7	18	150-XX-422-00-001000	153-XX-422-00-001000					
24	30,4	10,16	12,7	16	150-XX-424-00-001000	153-XX-424-00-001000					
28	35,5	10,16	12,7	14	150-XX-428-00-001000	153-XX-428-00-001000					
32	40,6	10,16	12,7	12	150-XX-432-00-001000	153-XX-432-00-001000					
24	30,4	15,24	17,7	16	150-XX-624-00-001000	153-XX-624-00-001000					
28	35,5	15,24	17,7	14	150-XX-628-00-001000	153-XX-628-00-001000					
32	40,6	15,24	17,7	12	150-XX-632-00-001000	153-XX-632-00-001000					
36	45,7	15,24	17,7	11	150-XX-636-00-001000	153-XX-636-00-001000					
40	50,8	15,24	17,7	10	150-XX-640-00-001000	153-XX-640-00-001000					
42	53,3	15,24	17,7	9	150-XX-642-00-001000	153-XX-642-00-001000					
48	60,9	15,24	17,7	8	150-XX-648-00-001000	153-XX-648-00-001000					
50	63,5	15,24	17,7	8	150-XX-650-00-001000	153-XX-650-00-001000					
52	66,0	15,24	17,7	7	150-XX-652-00-001000	153-XX-652-00-001000					
50	63,5	22,86	25,3	8	150-XX-950-00-001000	153-XX-950-00-001000					
52	66,0	22,86	25,3	7	150-XX-952-00-001000	153-XX-952-00-001000					
64	81,2	22,86	25,3	6	150-XX-964-00-001000	153-XX-964-00-001000					
					SPECIFY PLATING CODE XX =			10 ◆	90	40 ◆	
					Pin Plating			0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	

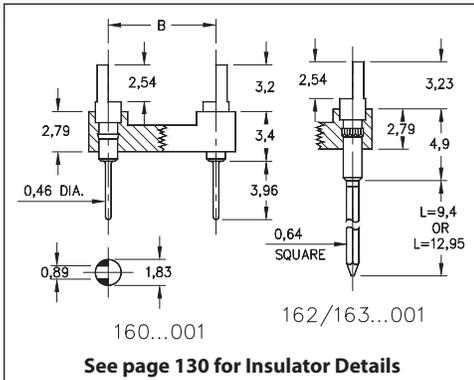


XX=Plating Code  
See Below



# DUAL-IN-LINE HEADERS

## SERIES 160, 162, 163 • SLOTTED, SOLDER TAIL & WRAPOST • OPEN FRAME



- Series 160, 162, and 163 DIL Headers are equipped with slotted heads to accept wires or component leads
- Series 160 terminations are pluggable 0,46 dia. solder tails MM #0282, See page 216 for details. Series 162 and 163 terminations are two or three level wraposts MM #1106. See page 228 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

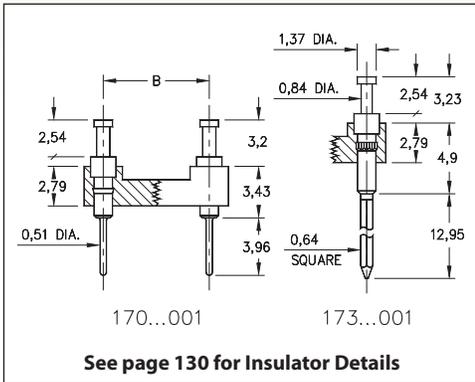


Total number of pins	Pin Pitch (mm)			Quantity per tube	ORDERING INFORMATION					
	A	B	C		Solder Tail	L = 9,4 (2 Level Wrapost)	L = 12,95 (3 Level Wrapost)			
10	12,6	5,08	7,6	41	160-XX-210-00-001000	162-XX-210-00-001000	163-XX-210-00-001000			
4	5,0	7,62	10,1	102	160-XX-304-00-001000	162-XX-304-00-001000	163-XX-304-00-001000			
6	7,6	7,62	10,1	67	160-XX-306-00-001000	162-XX-306-00-001000	163-XX-306-00-001000			
8	10,1	7,62	10,1	50	160-XX-308-00-001000	162-XX-308-00-001000	163-XX-308-00-001000			
10	12,6	7,62	10,1	40	160-XX-310-00-001000	162-XX-310-00-001000	163-XX-310-00-001000			
14	17,7	7,62	10,1	28	160-XX-314-00-001000	162-XX-314-00-001000	163-XX-314-00-001000			
16	20,3	7,62	10,1	25	160-XX-316-00-001000	162-XX-316-00-001000	163-XX-316-00-001000			
18	22,8	7,62	10,1	22	160-XX-318-00-001000	162-XX-318-00-001000	163-XX-318-00-001000			
20	25,3	7,62	10,1	20	160-XX-320-00-001000	162-XX-320-00-001000	163-XX-320-00-001000			
22	27,8	7,62	10,1	18	160-XX-322-00-001000	162-XX-322-00-001000	163-XX-322-00-001000			
24	30,4	7,62	10,1	16	160-XX-324-00-001000	162-XX-324-00-001000	163-XX-324-00-001000			
28	35,5	7,62	10,1	14	160-XX-328-00-001000	162-XX-328-00-001000	163-XX-328-00-001000			
20	25,4	10,16	12,7	20	160-XX-420-00-001000	162-XX-420-00-001000	163-XX-420-00-001000			
22	27,8	10,16	12,7	18	160-XX-422-00-001000	162-XX-422-00-001000	163-XX-422-00-001000			
24	30,4	10,16	12,7	16	160-XX-424-00-001000	162-XX-424-00-001000	163-XX-424-00-001000			
28	35,5	10,16	12,7	14	160-XX-428-00-001000	162-XX-428-00-001000	163-XX-428-00-001000			
32	40,6	10,16	12,7	12	160-XX-432-00-001000	162-XX-432-00-001000	163-XX-432-00-001000			
24	30,4	15,24	17,7	16	160-XX-624-00-001000	162-XX-624-00-001000	163-XX-624-00-001000			
28	35,5	15,24	17,7	14	160-XX-628-00-001000	162-XX-628-00-001000	163-XX-628-00-001000			
32	40,6	15,24	17,7	12	160-XX-632-00-001000	162-XX-632-00-001000	163-XX-632-00-001000			
36	45,7	15,24	17,7	11	160-XX-636-00-001000	162-XX-636-00-001000	163-XX-636-00-001000			
40	50,8	15,24	17,7	10	160-XX-640-00-001000	162-XX-640-00-001000	163-XX-640-00-001000			
42	53,3	15,24	17,7	9	160-XX-642-00-001000	162-XX-642-00-001000	163-XX-642-00-001000			
48	60,9	15,24	17,7	8	160-XX-648-00-001000	162-XX-648-00-001000	163-XX-648-00-001000			
50	63,5	15,24	17,7	8	160-XX-650-00-001000	162-XX-650-00-001000	163-XX-650-00-001000			
52	66,0	15,24	17,7	7	160-XX-652-00-001000	162-XX-652-00-001000	163-XX-652-00-001000			
50	63,5	22,86	25,3	8	160-XX-950-00-001000	162-XX-950-00-001000	163-XX-950-00-001000			
52	66,0	22,86	25,3	7	160-XX-952-00-001000	162-XX-952-00-001000	163-XX-952-00-001000			
64	81,2	22,86	25,3	6	160-XX-964-00-001000	162-XX-964-00-001000	163-XX-964-00-001000			
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> <b>XX=Plating Code</b>  <b>See to Right</b> </div>					<b>SPECIFY PLATING CODE XX =</b>		10 ◆	90	40 ◆	
					Pin Plating	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn		

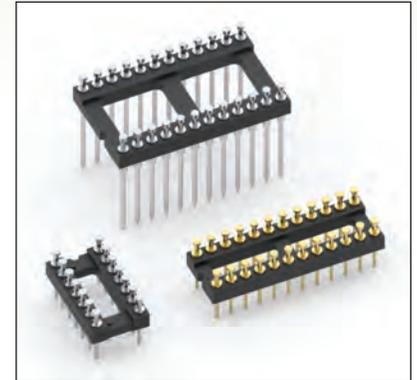


# DUAL-IN-LINE HEADERS

## SERIES 170, 173 • TURRET, SOLDER TAIL & WRAPOST • OPEN FRAME



- Series 170 & 173 DIL headers are equipped with turret heads for wiring applications
- Series 170 terminations are pluggable 0,51 dia. solder tails MM #0700, See page 216 for details. Series 173 terminations are three level wrapposts MM #0730. See page 228 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION					
	A	B	C		Solder Tail	3 Level Wrappost				
10	12,6	5,08	7,6	41	170-XX-210-00-001000	173-XX-210-00-001000				
4	5,0	7,62	10,1	102	170-XX-304-00-001000	173-XX-304-00-001000				
6	7,6	7,62	10,1	67	170-XX-306-00-001000	173-XX-306-00-001000				
8	10,1	7,62	10,1	50	170-XX-308-00-001000	173-XX-308-00-001000				
10	12,6	7,62	10,1	40	170-XX-310-00-001000	173-XX-310-00-001000				
14	17,7	7,62	10,1	28	170-XX-314-00-001000	173-XX-314-00-001000				
16	20,3	7,62	10,1	25	170-XX-316-00-001000	173-XX-316-00-001000				
18	22,8	7,62	10,1	22	170-XX-318-00-001000	173-XX-318-00-001000				
20	25,3	7,62	10,1	20	170-XX-320-00-001000	173-XX-320-00-001000				
22	27,8	7,62	10,1	18	170-XX-322-00-001000	173-XX-322-00-001000				
24	30,4	7,62	10,1	16	170-XX-324-00-001000	173-XX-324-00-001000				
28	35,5	7,62	10,1	14	170-XX-328-00-001000	173-XX-328-00-001000				
20	25,4	10,16	12,7	20	170-XX-420-00-001000	173-XX-420-00-001000				
22	27,8	10,16	12,7	18	170-XX-422-00-001000	173-XX-422-00-001000				
24	30,4	10,16	12,7	16	170-XX-424-00-001000	173-XX-424-00-001000				
28	35,5	10,16	12,7	14	170-XX-428-00-001000	173-XX-428-00-001000				
32	40,6	10,16	12,7	12	170-XX-432-00-001000	173-XX-432-00-001000				
24	30,4	15,24	17,7	16	170-XX-624-00-001000	173-XX-624-00-001000				
28	35,5	15,24	17,7	14	170-XX-628-00-001000	173-XX-628-00-001000				
32	40,6	15,24	17,7	12	170-XX-632-00-001000	173-XX-632-00-001000				
36	45,7	15,24	17,7	11	170-XX-636-00-001000	173-XX-636-00-001000				
40	50,8	15,24	17,7	10	170-XX-640-00-001000	173-XX-640-00-001000				
42	53,3	15,24	17,7	9	170-XX-642-00-001000	173-XX-642-00-001000				
48	60,9	15,24	17,7	8	170-XX-648-00-001000	173-XX-648-00-001000				
50	63,5	15,24	17,7	8	170-XX-650-00-001000	173-XX-650-00-001000				
52	66,0	15,24	17,7	7	170-XX-652-00-001000	173-XX-652-00-001000				
50	63,5	22,86	25,3	8	170-XX-950-00-001000	173-XX-950-00-001000				
52	66,0	22,86	25,3	7	170-XX-952-00-001000	173-XX-952-00-001000				
64	81,2	22,86	25,3	6	170-XX-964-00-001000	173-XX-964-00-001000				
					SPECIFY PLATING CODE XX =		10 ◆	90	40 ◆	
					Pin Plating		0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	

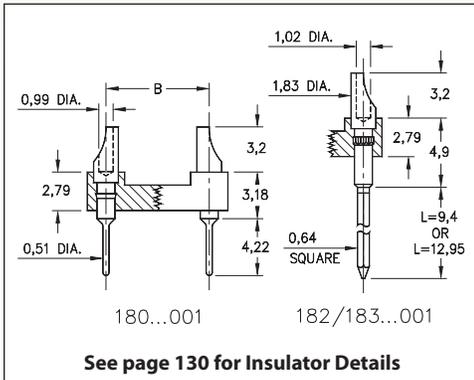


XX=Plating Code  
See Below

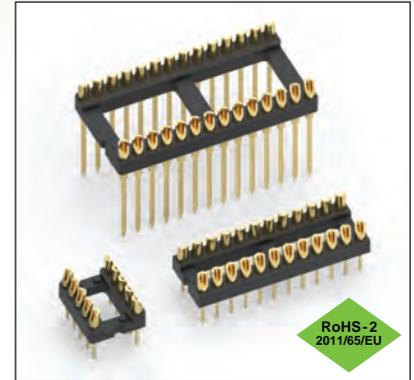


# DUAL-IN-LINE HEADERS

**SERIES 180, 182, 183 • SOLDER CUP, SOLDER TAIL & WRAPOST • OPEN FRAME**



- Series 180, 182, and 183 DIL Headers are equipped with solder cups for wiring applications
- Series 180 terminations are pluggable 0,51 dia. solder tails MM #8000, See page 216 for details. Series 182 and 183 terminations are two or three level wraposts MM #8301. See page 227 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

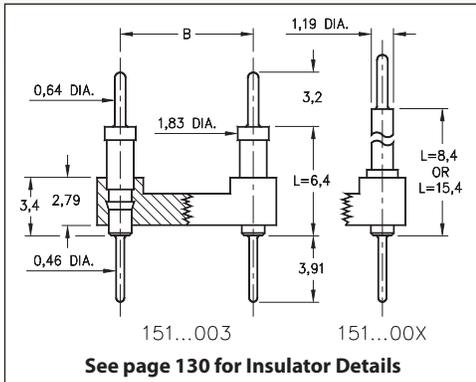


Total number of pins				Quantity per tube	ORDERING INFORMATION				
	A	B	C		Solder Tail	L = 9,4 (2 Level Wrapost)	L = 12,95 (3 Level Wrapost)		
10	12,6	5,08	7,6	41	180-10-210-00-001000	182-10-210-00-001000	183-10-210-00-001000		
4	5,0	7,62	10,1	102	180-10-304-00-001000	182-10-304-00-001000	183-10-304-00-001000		
6	7,6	7,62	10,1	67	180-10-306-00-001000	182-10-306-00-001000	183-10-306-00-001000		
8	10,1	7,62	10,1	50	180-10-308-00-001000	182-10-308-00-001000	183-10-308-00-001000		
10	12,6	7,62	10,1	40	180-10-310-00-001000	182-10-310-00-001000	183-10-310-00-001000		
14	17,7	7,62	10,1	28	180-10-314-00-001000	182-10-314-00-001000	183-10-314-00-001000		
16	20,3	7,62	10,1	25	180-10-316-00-001000	182-10-316-00-001000	183-10-316-00-001000		
18	22,8	7,62	10,1	22	180-10-318-00-001000	182-10-318-00-001000	183-10-318-00-001000		
20	25,3	7,62	10,1	20	180-10-320-00-001000	182-10-320-00-001000	183-10-320-00-001000		
22	27,8	7,62	10,1	18	180-10-322-00-001000	182-10-322-00-001000	183-10-322-00-001000		
24	30,4	7,62	10,1	16	180-10-324-00-001000	182-10-324-00-001000	183-10-324-00-001000		
28	35,5	7,62	10,1	14	180-10-328-00-001000	182-10-328-00-001000	183-10-328-00-001000		
20	25,4	10,16	12,7	20	180-10-420-00-001000	182-10-420-00-001000	183-10-420-00-001000		
22	27,8	10,16	12,7	18	180-10-422-00-001000	182-10-422-00-001000	183-10-422-00-001000		
24	30,4	10,16	12,7	16	180-10-424-00-001000	182-10-424-00-001000	183-10-424-00-001000		
28	35,5	10,16	12,7	14	180-10-428-00-001000	182-10-428-00-001000	183-10-428-00-001000		
32	40,6	10,16	12,7	12	180-10-432-00-001000	182-10-432-00-001000	183-10-432-00-001000		
24	30,4	15,24	17,7	16	180-10-624-00-001000	182-10-624-00-001000	183-10-624-00-001000		
28	35,5	15,24	17,7	14	180-10-628-00-001000	182-10-628-00-001000	183-10-628-00-001000		
32	40,6	15,24	17,7	12	180-10-632-00-001000	182-10-632-00-001000	183-10-632-00-001000		
36	45,7	15,24	17,7	11	180-10-636-00-001000	182-10-636-00-001000	183-10-636-00-001000		
40	50,8	15,24	17,7	10	180-10-640-00-001000	182-10-640-00-001000	183-10-640-00-001000		
42	53,3	15,24	17,7	9	180-10-642-00-001000	182-10-642-00-001000	183-10-642-00-001000		
48	60,9	15,24	17,7	8	180-10-648-00-001000	182-10-648-00-001000	183-10-648-00-001000		
50	63,5	15,24	17,7	8	180-10-650-00-001000	182-10-650-00-001000	183-10-650-00-001000		
52	66,0	15,24	17,7	7	180-10-652-00-001000	182-10-652-00-001000	183-10-652-00-001000		
50	63,5	22,86	25,3	8	180-10-950-00-001000	182-10-950-00-001000	183-10-950-00-001000		
52	66,0	22,86	25,3	7	180-10-952-00-001000	182-10-952-00-001000	183-10-952-00-001000		
64	81,2	22,86	25,3	6	180-10-964-00-001000	182-10-964-00-001000	183-10-964-00-001000		
<b>XX=Plating Code See to Right</b>					<b>SPECIFY PLATING CODE XX =</b>		10		
					Pin Plating		0,25µm Au		



# DUAL-IN-LINE HEADERS

## SERIES 151...003, 004, 005 • INTERCONNECT • OPEN FRAME



- Series 151 DIL Headers combine 0,64 dia. tails with pluggable 0,46 dia. solder tails
- Series:
  - 151...003 uses MM #5503 pins
  - 151...004 uses MM #5504 pins
  - 151...005 uses MM #5505 pins
 See page 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

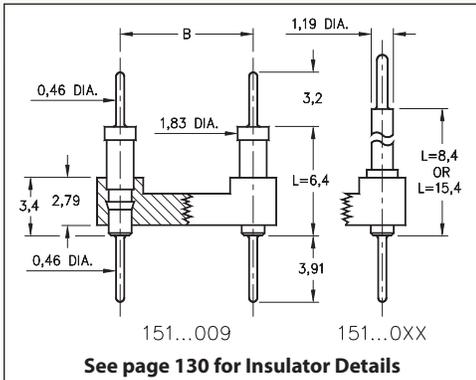


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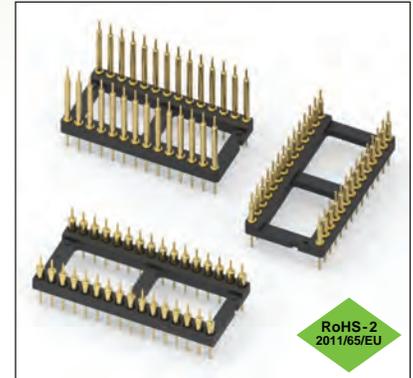
Total number of pins				Quantity per tube	ORDERING INFORMATION					
	A	B	C		L = 6,4	L = 8,4	L = 15,4			
10	12,6	5,08	7,6	41	151-10-210-00-003000	151-10-210-00-004000	151-10-210-00-005000			
4	5,0	7,62	10,1	102	151-10-304-00-003000	151-10-304-00-004000	151-10-304-00-005000			
6	7,6	7,62	10,1	67	151-10-306-00-003000	151-10-306-00-004000	151-10-306-00-005000			
8	10,1	7,62	10,1	50	151-10-308-00-003000	151-10-308-00-004000	151-10-308-00-005000			
10	12,6	7,62	10,1	40	151-10-310-00-003000	151-10-310-00-004000	151-10-310-00-005000			
14	17,7	7,62	10,1	28	151-10-314-00-003000	151-10-314-00-004000	151-10-314-00-005000			
16	20,3	7,62	10,1	25	151-10-316-00-003000	151-10-316-00-004000	151-10-316-00-005000			
18	22,8	7,62	10,1	22	151-10-318-00-003000	151-10-318-00-004000	151-10-318-00-005000			
20	25,3	7,62	10,1	20	151-10-320-00-003000	151-10-320-00-004000	151-10-320-00-005000			
22	27,8	7,62	10,1	18	151-10-322-00-003000	151-10-322-00-004000	151-10-322-00-005000			
24	30,4	7,62	10,1	16	151-10-324-00-003000	151-10-324-00-004000	151-10-324-00-005000			
28	35,5	7,62	10,1	14	151-10-328-00-003000	151-10-328-00-004000	151-10-328-00-005000			
20	25,4	10,16	12,7	20	151-10-420-00-003000	151-10-420-00-004000	151-10-420-00-005000			
22	27,8	10,16	12,7	18	151-10-422-00-003000	151-10-422-00-004000	151-10-422-00-005000			
24	30,4	10,16	12,7	16	151-10-424-00-003000	151-10-424-00-004000	151-10-424-00-005000			
28	35,5	10,16	12,7	14	151-10-428-00-003000	151-10-428-00-004000	151-10-428-00-005000			
32	40,6	10,16	12,7	12	151-10-432-00-003000	151-10-432-00-004000	151-10-432-00-005000			
24	30,4	15,24	17,7	16	151-10-624-00-003000	151-10-624-00-004000	151-10-624-00-005000			
28	35,5	15,24	17,7	14	151-10-628-00-003000	151-10-628-00-004000	151-10-628-00-005000			
32	40,6	15,24	17,7	12	151-10-632-00-003000	151-10-632-00-004000	151-10-632-00-005000			
36	45,7	15,24	17,7	11	151-10-636-00-003000	151-10-636-00-004000	151-10-636-00-005000			
40	50,8	15,24	17,7	10	151-10-640-00-003000	151-10-640-00-004000	151-10-640-00-005000			
42	53,3	15,24	17,7	9	151-10-642-00-003000	151-10-642-00-004000	151-10-642-00-005000			
48	60,9	15,24	17,7	8	151-10-648-00-003000	151-10-648-00-004000	151-10-648-00-005000			
50	63,5	15,24	17,7	8	151-10-650-00-003000	151-10-650-00-004000	151-10-650-00-005000			
52	66,0	15,24	17,7	7	151-10-652-00-003000	151-10-652-00-004000	151-10-652-00-005000			
50	63,5	22,86	25,3	8	151-10-950-00-003000	151-10-950-00-004000	151-10-950-00-005000			
52	66,0	22,86	25,3	7	151-10-952-00-003000	151-10-952-00-004000	151-10-952-00-005000			
64	81,2	22,86	25,3	6	151-10-964-00-003000	151-10-964-00-004000	151-10-964-00-005000			
XX=Plating Code See to Right					SPECIFY PLATING CODE XX =			10 ◆		
					Pin Plating			0,25µm Au		

# DUAL-IN-LINE HEADERS

## SERIES 151...009, 010, 011 • INTERCONNECT • OPEN FRAME



- Series 151 DIL Headers feature 0,46 dia. solder tails at both ends making these headers entirely pluggable
- Series:
  - 151...009 uses MM #5509 pins
  - 151...010 uses MM #5510 pins
  - 151...011 uses MM #5511 pins
 See pages 212 and 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

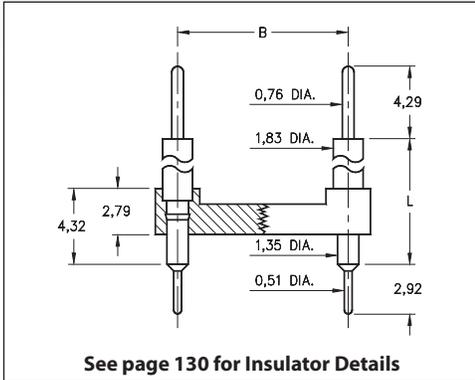


Total number of pins				Quantity per tube	ORDERING INFORMATION				
	A	B	C		L = 6,4	L = 8,4	L = 15,4		
10	12,6	5,08	7,6	41	151-10-210-00-009000	151-10-210-00-010000	151-10-210-00-011000		
4	5,0	7,62	10,1	102	151-10-304-00-009000	151-10-304-00-010000	151-10-304-00-011000		
6	7,6	7,62	10,1	67	151-10-306-00-009000	151-10-306-00-010000	151-10-306-00-011000		
8	10,1	7,62	10,1	50	151-10-308-00-009000	151-10-308-00-010000	151-10-308-00-011000		
10	12,6	7,62	10,1	40	151-10-310-00-009000	151-10-310-00-010000	151-10-310-00-011000		
14	17,7	7,62	10,1	28	151-10-314-00-009000	151-10-314-00-010000	151-10-314-00-011000		
16	20,3	7,62	10,1	25	151-10-316-00-009000	151-10-316-00-010000	151-10-316-00-011000		
18	22,8	7,62	10,1	22	151-10-318-00-009000	151-10-318-00-010000	151-10-318-00-011000		
20	25,3	7,62	10,1	20	151-10-320-00-009000	151-10-320-00-010000	151-10-320-00-011000		
22	27,8	7,62	10,1	18	151-10-322-00-009000	151-10-322-00-010000	151-10-322-00-011000		
24	30,4	7,62	10,1	16	151-10-324-00-009000	151-10-324-00-010000	151-10-324-00-011000		
28	35,5	7,62	10,1	14	151-10-328-00-009000	151-10-328-00-010000	151-10-328-00-011000		
20	25,4	10,16	12,7	20	151-10-420-00-009000	151-10-420-00-010000	151-10-420-00-011000		
22	27,8	10,16	12,7	18	151-10-422-00-009000	151-10-422-00-010000	151-10-422-00-011000		
24	30,4	10,16	12,7	16	151-10-424-00-009000	151-10-424-00-010000	151-10-424-00-011000		
28	35,5	10,16	12,7	14	151-10-428-00-009000	151-10-428-00-010000	151-10-428-00-011000		
32	40,6	10,16	12,7	12	151-10-432-00-009000	151-10-432-00-010000	151-10-432-00-011000		
24	30,4	15,24	17,7	16	151-10-624-00-009000	151-10-624-00-010000	151-10-624-00-011000		
28	35,5	15,24	17,7	14	151-10-628-00-009000	151-10-628-00-010000	151-10-628-00-011000		
32	40,6	15,24	17,7	12	151-10-632-00-009000	151-10-632-00-010000	151-10-632-00-011000		
36	45,7	15,24	17,7	11	151-10-636-00-009000	151-10-636-00-010000	151-10-636-00-011000		
40	50,8	15,24	17,7	10	151-10-640-00-009000	151-10-640-00-010000	151-10-640-00-011000		
42	53,3	15,24	17,7	9	151-10-642-00-009000	151-10-642-00-010000	151-10-642-00-011000		
48	60,9	15,24	17,7	8	151-10-648-00-009000	151-10-648-00-010000	151-10-648-00-011000		
50	63,5	15,24	17,7	8	151-10-650-00-009000	151-10-650-00-010000	151-10-650-00-011000		
52	66,0	15,24	17,7	7	151-10-652-00-009000	151-10-652-00-010000	151-10-652-00-011000		
50	63,5	22,86	25,3	8	151-10-950-00-009000	151-10-950-00-010000	151-10-950-00-011000		
52	66,0	22,86	25,3	7	151-10-952-00-009000	151-10-952-00-010000	151-10-952-00-011000		
64	81,2	22,86	25,3	6	151-10-964-00-009000	151-10-964-00-010000	151-10-964-00-011000		
XX=Plating Code See to Right					SPECIFY PLATING CODE XX =		10 ◆		
					Pin Plating		0,25µm Au		



# DUAL-IN-LINE HEADERS

## SERIES 134 • INTERCONNECT • OPEN FRAME



- Series 134 DIL Headers combine 0,76 diameter pins with pluggable 0,51 diameter solder tails

- Series:
  - 134...020 uses MM #3402 pins
  - 134...010 uses MM #3401 pins
  - 134...050 uses MM #3405 pins
  - 134...000 uses MM #3400 pins
  - 134...100 uses MM #3410 pins

See page 215 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations

- For Electrical, Mechanical and Environmental Data, see page 264 for details

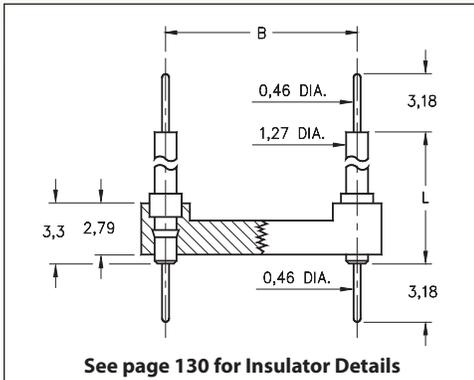


Total number of pins	Pin Spacing			Quantity per tube	ORDERING INFORMATION					
	A	B	C		L = 4,83	L = 5,99	L = 8,0	L = 15,37	L = 27,18	
10	12,6	5,08	7,6	41	134-10-210-00-020000	134-10-210-00-010000	134-10-210-00-050000	134-10-210-00-000000	134-10-210-00-100000	
4	5,0	7,62	10,1	102	134-10-304-00-020000	134-10-304-00-010000	134-10-304-00-050000	134-10-304-00-000000	134-10-304-00-100000	
6	7,6	7,62	10,1	67	134-10-306-00-020000	134-10-306-00-010000	134-10-306-00-050000	134-10-306-00-000000	134-10-306-00-100000	
8	10,1	7,62	10,1	50	134-10-308-00-020000	134-10-308-00-010000	134-10-308-00-050000	134-10-308-00-000000	134-10-308-00-100000	
10	12,6	7,62	10,1	40	134-10-310-00-020000	134-10-310-00-010000	134-10-310-00-050000	134-10-310-00-000000	134-10-310-00-100000	
14	17,7	7,62	10,1	28	134-10-314-00-020000	134-10-314-00-010000	134-10-314-00-050000	134-10-314-00-000000	134-10-314-00-100000	
16	20,3	7,62	10,1	25	134-10-316-00-020000	134-10-316-00-010000	134-10-316-00-050000	134-10-316-00-000000	134-10-316-00-100000	
18	22,8	7,62	10,1	22	134-10-318-00-020000	134-10-318-00-010000	134-10-318-00-050000	134-10-318-00-000000	134-10-318-00-100000	
20	25,3	7,62	10,1	20	134-10-320-00-020000	134-10-320-00-010000	134-10-320-00-050000	134-10-320-00-000000	134-10-320-00-100000	
22	27,8	7,62	10,1	18	134-10-322-00-020000	134-10-322-00-010000	134-10-322-00-050000	134-10-322-00-000000	134-10-322-00-100000	
24	30,4	7,62	10,1	16	134-10-324-00-020000	134-10-324-00-010000	134-10-324-00-050000	134-10-324-00-000000	134-10-324-00-100000	
28	35,5	7,62	10,1	14	134-10-328-00-020000	134-10-328-00-010000	134-10-328-00-050000	134-10-328-00-000000	134-10-328-00-100000	
20	25,4	10,16	12,7	20	134-10-420-00-020000	134-10-420-00-010000	134-10-420-00-050000	134-10-420-00-000000	134-10-420-00-100000	
22	27,8	10,16	12,7	18	134-10-422-00-020000	134-10-422-00-010000	134-10-422-00-050000	134-10-422-00-000000	134-10-422-00-100000	
24	30,4	10,16	12,7	16	134-10-424-00-020000	134-10-424-00-010000	134-10-424-00-050000	134-10-424-00-000000	134-10-424-00-100000	
28	35,5	10,16	12,7	14	134-10-428-00-020000	134-10-428-00-010000	134-10-428-00-050000	134-10-428-00-000000	134-10-428-00-100000	
32	40,6	10,16	12,7	12	134-10-432-00-020000	134-10-432-00-010000	134-10-432-00-050000	134-10-432-00-000000	134-10-432-00-100000	
24	30,4	15,24	17,7	16	134-10-624-00-020000	134-10-624-00-010000	134-10-624-00-050000	134-10-624-00-000000	134-10-624-00-100000	
28	35,5	15,24	17,7	14	134-10-628-00-020000	134-10-628-00-010000	134-10-628-00-050000	134-10-628-00-000000	134-10-628-00-100000	
32	40,6	15,24	17,7	12	134-10-632-00-020000	134-10-632-00-010000	134-10-632-00-050000	134-10-632-00-000000	134-10-632-00-100000	
36	45,7	15,24	17,7	11	134-10-636-00-020000	134-10-636-00-010000	134-10-636-00-050000	134-10-636-00-000000	134-10-636-00-100000	
40	50,8	15,24	17,7	10	134-10-640-00-020000	134-10-640-00-010000	134-10-640-00-050000	134-10-640-00-000000	134-10-640-00-100000	
42	53,3	15,24	17,7	9	134-10-642-00-020000	134-10-642-00-010000	134-10-642-00-050000	134-10-642-00-000000	134-10-642-00-100000	
48	60,9	15,24	17,7	8	134-10-648-00-020000	134-10-648-00-010000	134-10-648-00-050000	134-10-648-00-000000	134-10-648-00-100000	
50	63,5	15,24	17,7	8	134-10-650-00-020000	134-10-650-00-010000	134-10-650-00-050000	134-10-650-00-000000	134-10-650-00-100000	
52	66,0	15,24	17,7	7	134-10-652-00-020000	134-10-652-00-010000	134-10-652-00-050000	134-10-652-00-000000	134-10-652-00-100000	
50	63,5	22,86	25,3	8	134-10-950-00-020000	134-10-950-00-010000	134-10-950-00-050000	134-10-950-00-000000	134-10-950-00-100000	
52	66,0	22,86	25,3	7	134-10-952-00-020000	134-10-952-00-010000	134-10-952-00-050000	134-10-952-00-000000	134-10-952-00-100000	
64	81,2	22,86	25,3	6	134-10-964-00-020000	134-10-964-00-010000	134-10-964-00-050000	134-10-964-00-000000	134-10-964-00-100000	
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     XX=Plating Code See to Right                 </div>					SPECIFY PLATING CODE XX =		10			
					Pin Plating		0,25µm Au			



# DUAL-IN-LINE HEADERS

## SERIES 142 • INTERCONNECT • OPEN FRAME



- Series 142 DIL Headers have double-ended 0,46 diameter pluggable solder tails
- Used to interconnect PC Boards with spacings of 5,33, 8,51, 14,86 or 21,21. Series 142 uses MM #4259-1, -2, -3 or -4 pins. See page 212 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

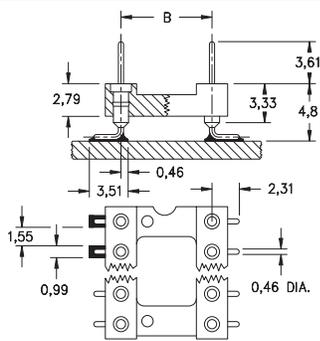


Total number of pins				Quantity per tube	ORDERING INFORMATION			
	A	B	C		L = 5,33	L = 8,51	L = 14,86	L = 21,21
6	7,6	7,62	10,1	67	142-XX-306-00-591000	142-XX-306-00-592000	142-XX-306-00-593000	142-XX-306-00-594000
8	10,1	7,62	10,1	50	142-XX-308-00-591000	142-XX-308-00-592000	142-XX-308-00-593000	142-XX-308-00-594000
14	17,7	7,62	10,1	29	142-XX-314-00-591000	142-XX-314-00-592000	142-XX-314-00-593000	142-XX-314-00-594000
16	20,3	7,62	10,1	25	142-XX-316-00-591000	142-XX-316-00-592000	142-XX-316-00-593000	142-XX-316-00-594000
18	22,8	7,62	10,1	22	142-XX-318-00-591000	142-XX-318-00-592000	142-XX-318-00-593000	142-XX-318-00-594000
20	25,3	7,62	10,1	40	142-XX-320-00-591000	142-XX-320-00-592000	142-XX-320-00-593000	142-XX-320-00-594000
24	30,4	7,62	10,1	17	142-XX-324-00-591000	142-XX-324-00-592000	142-XX-324-00-593000	142-XX-324-00-594000
22	27,8	10,16	12,7	14	142-XX-422-00-591000	142-XX-422-00-592000	142-XX-422-00-593000	142-XX-422-00-594000
24	30,4	15,24	17,7	16	142-XX-624-00-591000	142-XX-624-00-592000	142-XX-624-00-593000	142-XX-624-00-594000
28	35,5	15,24	17,7	14	142-XX-628-00-591000	142-XX-628-00-592000	142-XX-628-00-593000	142-XX-628-00-594000
32	40,6	15,24	17,7	12	142-XX-632-00-591000	142-XX-632-00-592000	142-XX-632-00-593000	142-XX-632-00-594000
40	50,8	15,24	17,7	10	142-XX-640-00-591000	142-XX-640-00-592000	142-XX-640-00-593000	142-XX-640-00-594000
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     XX=Plating Code See to Right                 </div>					SPECIFY PLATING CODE XX =			
					Pin Plating	10	90	40
					0,25µm Au	5,08µm Sn/Pb	5,08µm Sn	



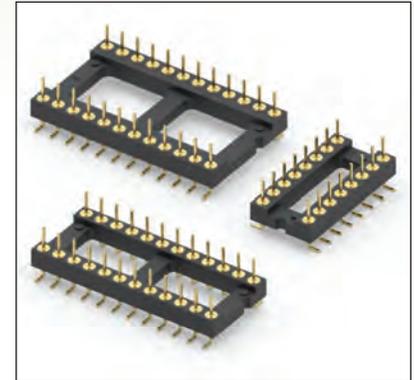
# DUAL-IN-LINE HEADERS

## SERIES 150 • SURFACE MOUNT, GULL WING • OPEN FRAME



See page 130 for Insulator Details

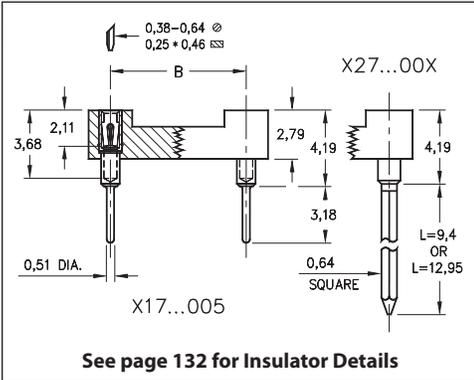
- Surface mount Gull Wing DIP headers for adapters and board stacking on 2,54 lead spacing
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints
- Series 150 uses MM #3404 pins. See page 212 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION				
	A	B	C						
10	12,6	5,08	7,6	40	150-10-210-00-106000				
4	5,0	7,62	10,1	102	150-10-304-00-106000				
6	7,6	7,62	10,1	67	150-10-306-00-106000				
8	10,1	7,62	10,1	50	150-10-308-00-106000				
10	12,6	7,62	10,1	40	150-10-310-00-106000				
14	17,7	7,62	10,1	29	150-10-314-00-106000				
16	20,3	7,62	10,1	25	150-10-316-00-106000				
18	22,8	7,62	10,1	22	150-10-318-00-106000				
20	25,3	7,62	10,1	20	150-10-320-00-106000				
22	27,8	7,62	10,1	18	150-10-322-00-106000				
24	30,4	7,62	10,1	16	150-10-324-00-106000				
28	35,5	7,62	10,1	14	150-10-328-00-106000				
20	25,4	10,16	12,7	20	150-10-420-00-106000				
22	27,8	10,16	12,7	18	150-10-422-00-106000				
24	30,4	10,16	12,7	16	150-10-424-00-106000				
28	35,5	10,16	12,7	14	150-10-428-00-106000				
32	40,6	10,16	12,7	12	150-10-432-00-106000				
24	30,4	15,24	17,7	16	150-10-624-00-106000				
28	35,5	15,24	17,7	14	150-10-628-00-106000				
32	40,6	15,24	17,7	12	150-10-632-00-106000				
36	45,7	15,24	17,7	11	150-10-636-00-106000				
40	50,8	15,24	17,7	10	150-10-640-00-106000				
42	53,3	15,24	17,7	9	150-10-642-00-106000				
48	60,9	15,24	17,7	8	150-10-648-00-106000				
50	63,5	15,24	17,7	8	150-10-650-00-106000				
52	66,0	15,24	17,7	7	150-10-652-00-106000				
50	63,5	22,86	25,3	8	150-10-950-00-106000	 XX=Plating Code See Below			
52	66,0	22,86	25,3	7	150-10-952-00-106000				
64	81,2	22,86	25,3	6	150-10-964-00-106000				
See page 264 for coplanarity information					SPECIFY PLATING CODE XX =		10		
					Pin Plating		0,25µm Au		

# DUAL-IN-LINE SOCKETS

**SERIES 117, 127, 217, 227, 317, 327 • SHRINK DIP, SOLDER TAIL & WRAPOST**



- High density DIP sockets and strips for devices featuring 1,78 lead spacing
- Solder tails use MM #1802 receptacles, See page 169 for details. Wraposts use MM #1702-2 or 1703-3 receptacles, See page 198 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

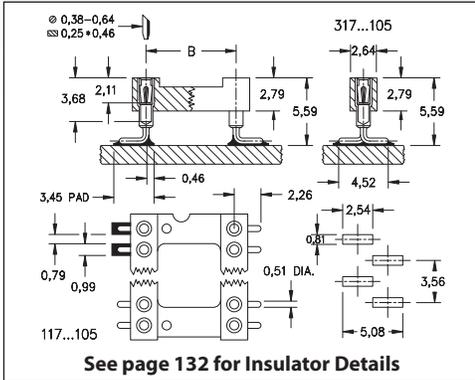


Total number of pins	Pin Configuration			Quantity per tube	ORDERING INFORMATION					
	A	B	C		Solder Tail	L = 9,4 (2 Level Wrapost)	L = 12,95 (3 Level Wrapost)			
					<b>OPEN FRAME DIP SOCKET</b>					
16	14,53	7,62	9,91	35	117-XX-316-41-005000	127-XX-316-41-002000	127-XX-316-41-003000			
28	25,2	10,16	12,45	20	117-XX-428-41-005000	127-XX-428-41-002000	127-XX-428-41-003000			
30	26,97	10,16	12,45	18	117-XX-430-41-005000	127-XX-430-41-002000	127-XX-430-41-003000			
48	42,98	10,16	12,45	12	117-XX-448-41-005000	127-XX-448-41-002000	127-XX-448-41-003000			
20	18,08	15,24	17,53	28	117-XX-620-41-005000	127-XX-620-41-002000	127-XX-620-41-003000			
28	25,2	15,24	17,53	20	117-XX-628-41-005000	127-XX-628-41-002000	127-XX-628-41-003000			
40	35,86	15,24	17,53	14	117-XX-640-41-005000	127-XX-640-41-002000	127-XX-640-41-003000			
42	37,64	15,24	17,53	13	117-XX-642-41-005000	127-XX-642-41-002000	127-XX-642-41-003000			
48	42,98	15,24	17,53	11	117-XX-648-41-005000	127-XX-648-41-002000	127-XX-648-41-003000			
52	46,53	15,24	17,53	11	117-XX-652-41-005000	127-XX-652-41-002000	127-XX-652-41-003000			
56	50,1	15,24	17,53	10	117-XX-656-41-005000	127-XX-656-41-002000	127-XX-656-41-003000			
64	57,2	15,24	17,53	8	117-XX-664-41-005000	127-XX-664-41-002000	127-XX-664-41-003000			
68	60,76	15,24	17,53	8	117-XX-668-41-005000	127-XX-668-41-002000	127-XX-668-41-003000			
64	57,2	19,05	21,34	8	117-XX-764-41-005000	127-XX-764-41-002000	127-XX-764-41-003000			
					<b>CLOSED FRAME DIP SOCKET</b>					
64	57,2	19,05	21,34	8	217-XX-764-41-005000	227-XX-764-41-002000	227-XX-764-41-003000			
					<b>SINGLE ROW STRIP SOCKET</b>					
					If desired, we will supply any length up to 21 pins.					
21	37,64	---	2,64	-	317-XX-121-41-005000	327-XX-121-41-002000	327-XX-121-41-003000			
					<b>SPECIFY PLATING CODE XX=</b>					
<b>XX=Plating Code See to Right</b>					Sleeve (Pin)	91	93	41	43	47
					Contact (Clip)	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn

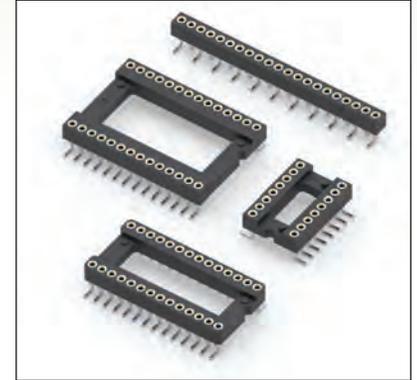


# DUAL-IN-LINE SOCKETS

## SERIES 117, 317 • GULL WING SHRINK DIP SOCKETS & STRIPS, SMT SOLDER TAIL



- Surface mount Gull Wing DIP & strip sockets for devices featuring 1,78 lead spacing
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 117 and 317 use MM #1802 pins. See page 169 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



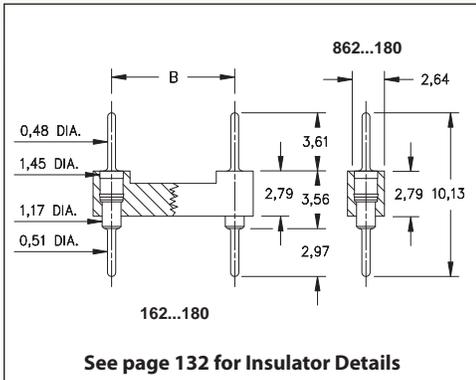
Total number of pins	Pin Spacing			Quantity per tube	ORDERING INFORMATION				
	A	B	C						
16	14,53	7,62	9,91	35	117-XX-316-41-105000				
28	25,20	10,16	12,45	20	117-XX-428-41-105000				
30	26,97	10,16	12,45	18	117-XX-430-41-105000				
48	42,98	10,16	12,45	12	117-XX-448-41-105000				
20	18,08	15,24	17,53	28	117-XX-620-41-105000				
28	25,20	15,24	17,53	20	117-XX-628-41-105000				
40	35,86	15,24	17,53	14	117-XX-640-41-105000				
42	37,64	15,24	17,53	13	117-XX-642-41-105000				
48	42,98	15,24	17,53	12	117-XX-648-41-105000				
52	46,53	15,24	17,53	11	117-XX-652-41-105000				
56	50,09	15,24	17,53	10	117-XX-656-41-105000				
64	57,20	15,24	17,53	9	117-XX-664-41-105000				
68	60,76	15,24	17,53	8	117-XX-668-41-105000				
64	57,20	19,05	21,34	8	117-XX-764-41-105000				
					<b>SINGLE ROW STRIP SOCKET</b> If desired, we will supply any length up to 21 pins.				
21	37,64	---	2,64	-	317-XX-121-41-105000				
See page 264 for coplanarity information					<b>SPECIFY PLATING CODE XX=</b>				
					Sleeve (Pin)		91	41	43
					Contact (Clip)		5,08µm Sn/Pb	0,25µm Au	5,08µm Sn, 0,76µm Au

XX=Plating Code  
See Below



# DUAL-IN-LINE HEADERS

## SERIES 162, 862 • SHRINK DIP HEADER AND STRIPS, SOLDER TAIL



- High density DIP headers & strips for adapters and board stacking applications with 1,78 lead spacing
- Series 162 DIP headers and Series 862 strip headers use MM #6218 pins. See page 208 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



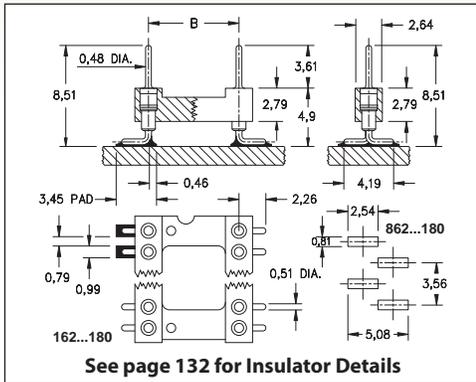
Total number of pins				Quantity per tube	<h3>ORDERING INFORMATION</h3>				
	A	B	C						
16	14,53	7,62	9,91	35	162-XX-316-00-180000				
28	25,20	10,16	12,45	20	162-XX-428-00-180000				
30	26,97	10,16	12,45	18	162-XX-430-00-180000				
48	42,98	10,16	12,45	12	162-XX-448-00-180000				
20	18,08	15,24	17,53	28	162-XX-620-00-180000				
28	25,20	15,24	17,53	20	162-XX-628-00-180000				
40	35,86	15,24	17,53	14	162-XX-640-00-180000				
42	37,64	15,24	17,53	13	162-XX-642-00-180000				
48	42,98	15,24	17,53	12	162-XX-648-00-180000				
52	46,53	15,24	17,53	11	162-XX-652-00-180000				
56	50,09	15,24	17,53	10	162-XX-656-00-180000				
64	57,20	15,24	17,53	9	162-XX-664-00-180000				
68	60,76	15,24	17,53	8	162-XX-668-00-180000				
64	57,20	19,05	21,34	8	162-XX-764-00-180000				
					<b>SINGLE ROW STRIP HEADER</b> If desired, we will supply any length up to 21 pins.				
21	37,64	---	2,64	---	862-XX-021-00-180000				
<b>SPECIFY PLATING CODE XX =</b>					10	90	40		
Pin Plating					0,25µm Au	5,08µm Sn/Pb	5,08µm Sn		

XX=Plating Code  
See Below

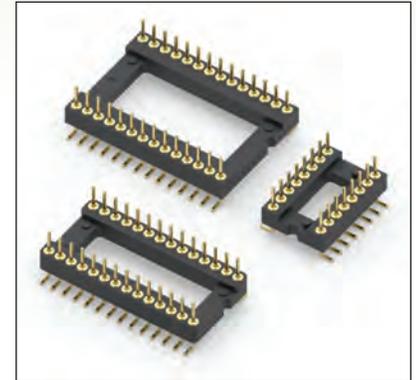


# DUAL-IN-LINE HEADERS

## SERIES 162, 862 • GULL WING SHRINK DIP HEADERS & STRIPS, SMT SOLDER TAIL



- Surface mount Gull Wing DIP headers & strips for adapters and board stacking applications with 1,78 lead spacing
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints
- Series 162 and Series 862 use MM #6218 pins. See page 208 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



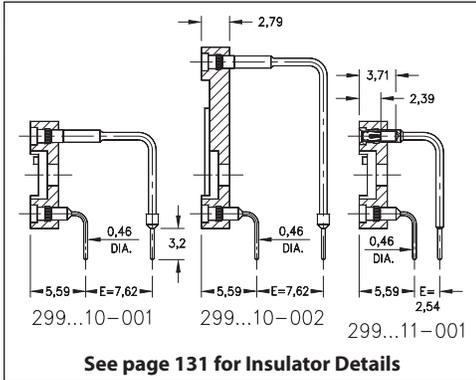
Total number of pins				Quantity per tube	ORDERING INFORMATION	
	A	B	C			
16	14,53	7,62	9,91	35	162-10-316-30-180000	
28	25,20	10,16	12,45	20	162-10-428-30-180000	
30	26,97	10,16	12,45	18	162-10-430-30-180000	
48	42,98	10,16	12,45	12	162-10-448-30-180000	
20	18,08	15,24	17,53	28	162-10-620-30-180000	
28	25,20	15,24	17,53	20	162-10-628-30-180000	
40	35,86	15,24	17,53	14	162-10-640-30-180000	
42	37,64	15,24	17,53	13	162-10-642-30-180000	
48	42,98	15,24	17,53	12	162-10-648-30-180000	
52	46,53	15,24	17,53	11	162-10-652-30-180000	
56	50,09	15,24	17,53	10	162-10-656-30-180000	
64	57,20	15,24	17,53	9	162-10-664-30-180000	
68	60,76	15,24	17,53	8	162-10-668-30-180000	
64	57,20	19,05	21,34	8	162-10-764-30-180000	
					<b>SINGLE ROW STRIP SOCKET</b> If desired, we will supply any length up to 21 pins.	
21	37,64	---	2,64	---	862-10-021-30-180000	
See page 264 for coplanarity information					SPECIFY PLATING CODE XX =	
					10	
Pin Plating					0,25µm Au	

XX=Plating Code  
See Below

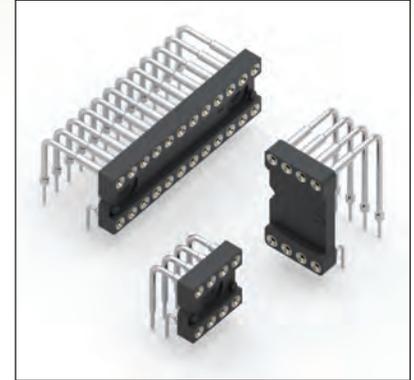


# DUAL-IN-LINE SOCKETS

## SERIES 299 • RIGHT ANGLE MOUNT • CLOSED FRAME



- Ideal for mounting components, such as LED displays, where the face must be parallel to the PCB surface
- Sockets have solder tail termination and are available with either 7,62 (standard) or 2,54 row spacing
- Series 299 uses MM #1103/0903, #1103/1610 or #1103/0904 pins. See pages 166 & 167 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins				Quantity per tube	ORDERING INFORMATION	
	A	B	C		E = 2,54	E = 7,62
6	7,6	7,62	10,1		299-XX-306-11-001000	* 299-XX-306-10-001000
8	10,1	7,62	10,1		299-XX-308-11-001000	* 299-XX-308-10-001000
10	12,6	7,62	10,1		299-XX-310-11-001000	* 299-XX-310-10-001000
12	15,2	7,62	10,1	33	299-XX-312-11-001000	* 299-XX-312-10-001000
14	17,7	7,62	10,1	29	299-XX-314-11-001000	* 299-XX-314-10-001000
16	20,3	7,62	10,1	25	299-XX-316-11-001000	* 299-XX-316-10-001000
18	22,8	7,62	10,1	22	299-XX-318-11-001000	* 299-XX-318-10-001000
20	25,3	7,62	10,1	20	299-XX-320-11-001000	* 299-XX-320-10-001000
24	30,4	7,62	10,1	16	299-XX-324-11-001000	* 299-XX-324-10-001000
8	10,1	15,24	17,7	50		299-XX-608-10-002000
10	12,6	15,24	17,7	40		299-XX-610-10-002000
12	15,2	15,24	17,7	34		299-XX-612-10-002000
14	17,7	15,24	17,7	28		299-XX-614-10-002000
16	20,3	15,24	17,7	25		299-XX-616-10-002000
18	22,8	15,24	17,7	22		299-XX-618-10-002000
20	25,3	15,24	17,7	20		299-XX-620-10-002000
22	27,8	15,24	17,7	18		299-XX-622-10-002000
24	30,4	15,24	17,7	16		299-XX-624-10-002000
26	33,0	15,24	17,7	15		299-XX-626-10-002000
28	35,5	15,24	17,7	14		299-XX-628-10-002000
30	38,1	15,24	17,7	13		299-XX-630-10-002000
32	40,6	15,24	17,7	12		299-XX-632-10-002000
36	45,7	15,24	17,7	11		299-XX-636-10-002000
40	50,8	15,24	17,7	10		299-XX-640-10-002000
<b>SPECIFY PLATING CODE XX =</b>					93	43
Sleeve (Pin)					5,08µm Sn/Pb	5,08µm Sn
Contact (Clip)					0,76µm Au	0,76µm Au

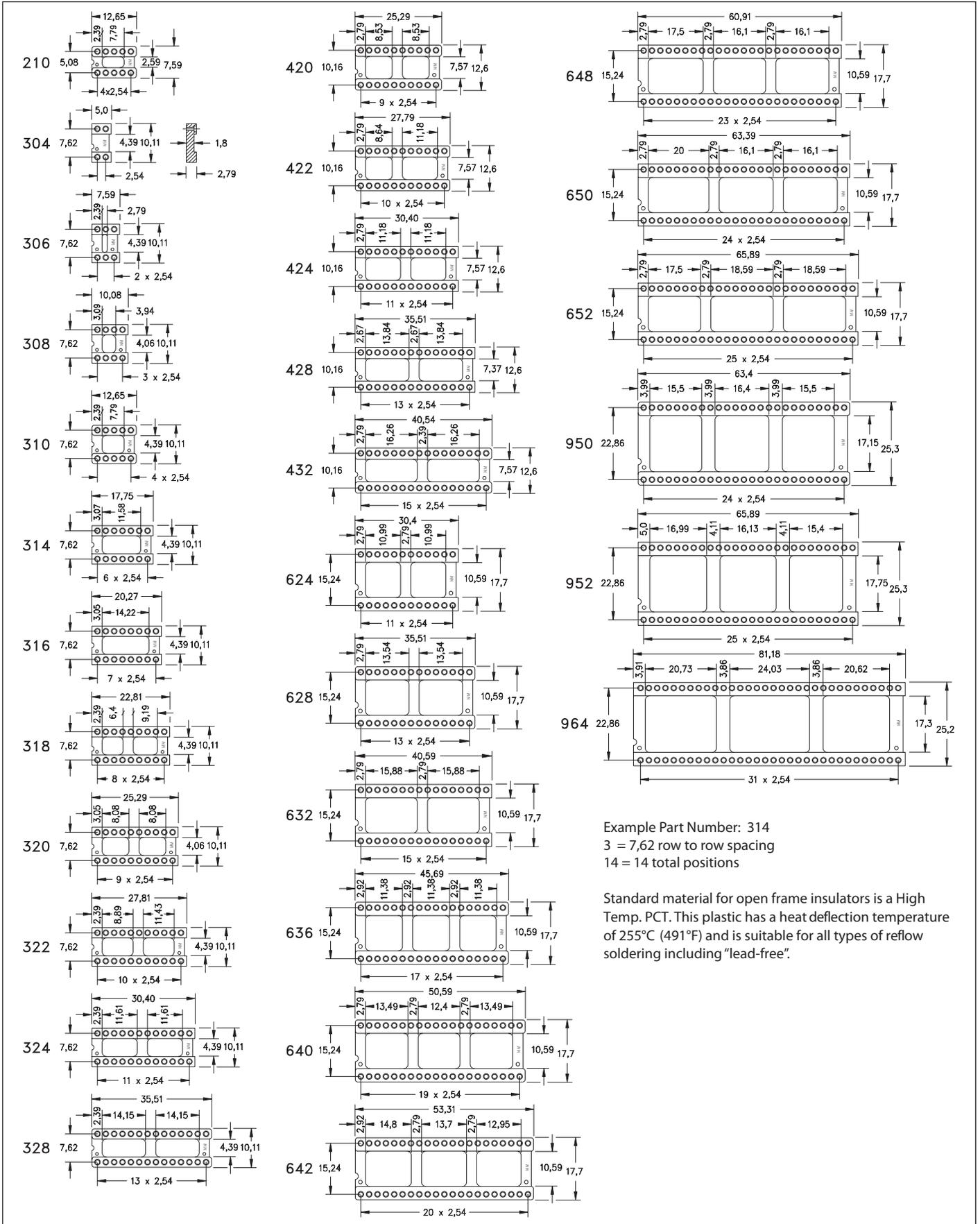


**XX=Plating Code  
See Below**

\* Not available in tubes



# DUAL-IN-LINE INSULATORS STANDARD OPEN FRAME



Example Part Number: 314

3 = 7,62 row to row spacing

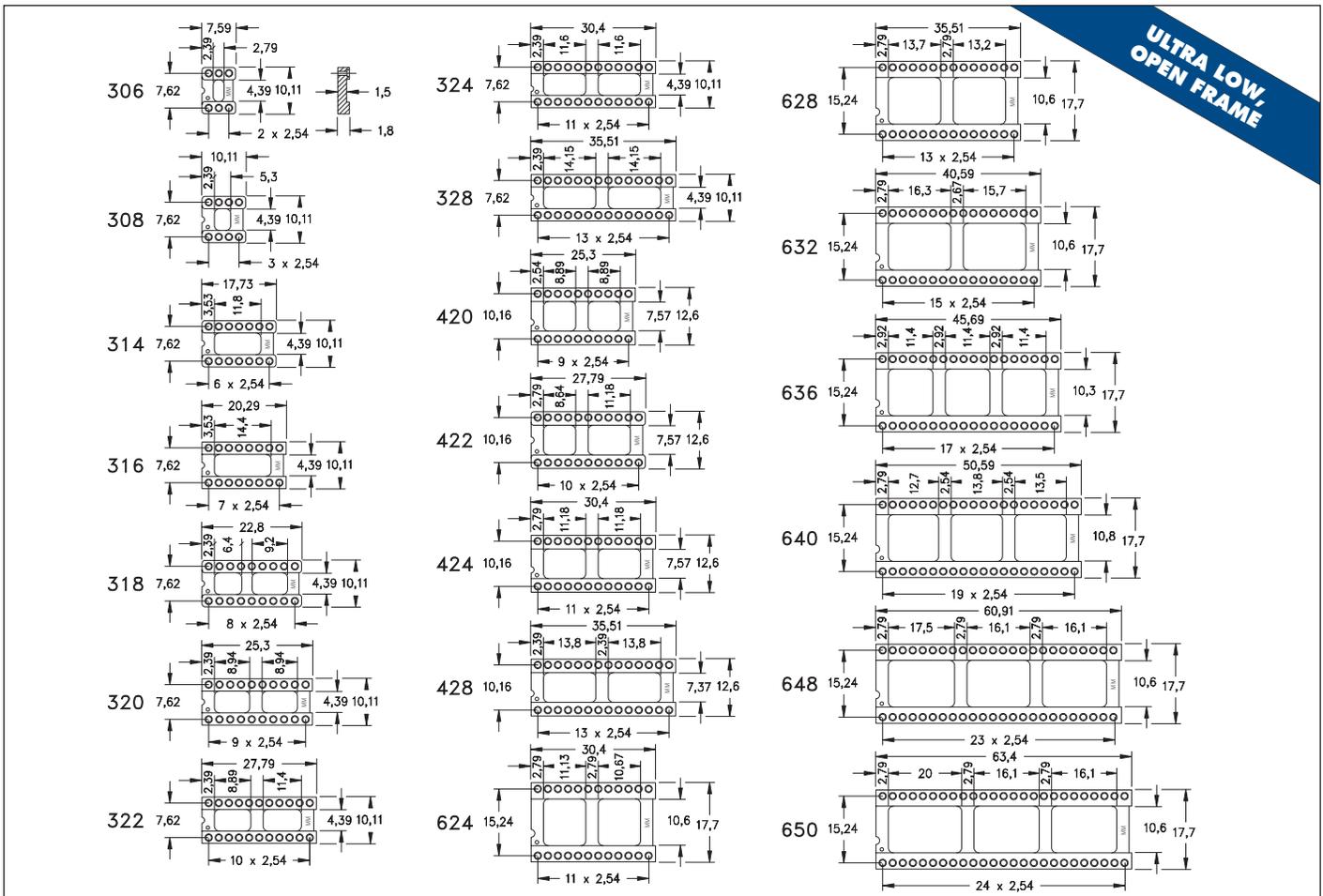
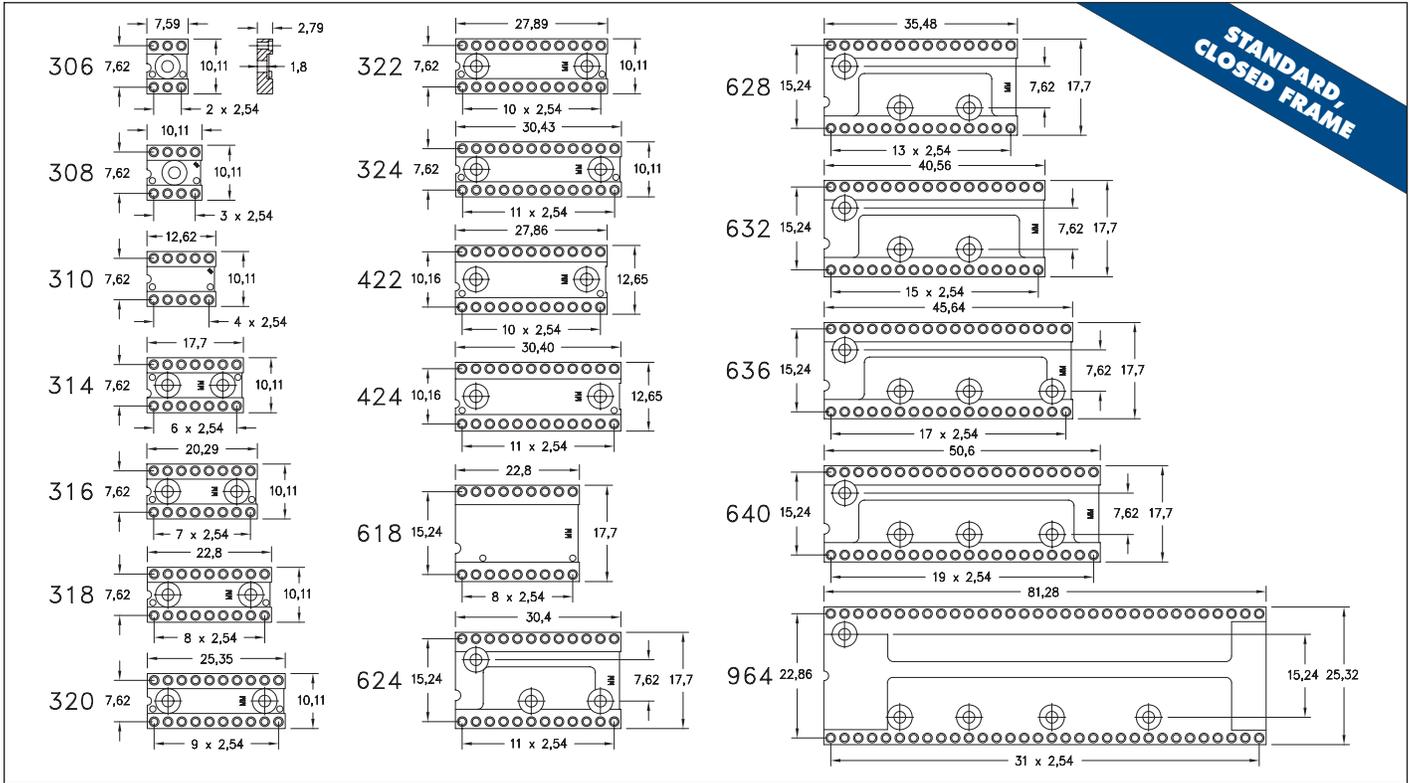
14 = 14 total positions

Standard material for open frame insulators is a High Temp. PCT. This plastic has a heat deflection temperature of 255°C (491°F) and is suitable for all types of reflow soldering including "lead-free".



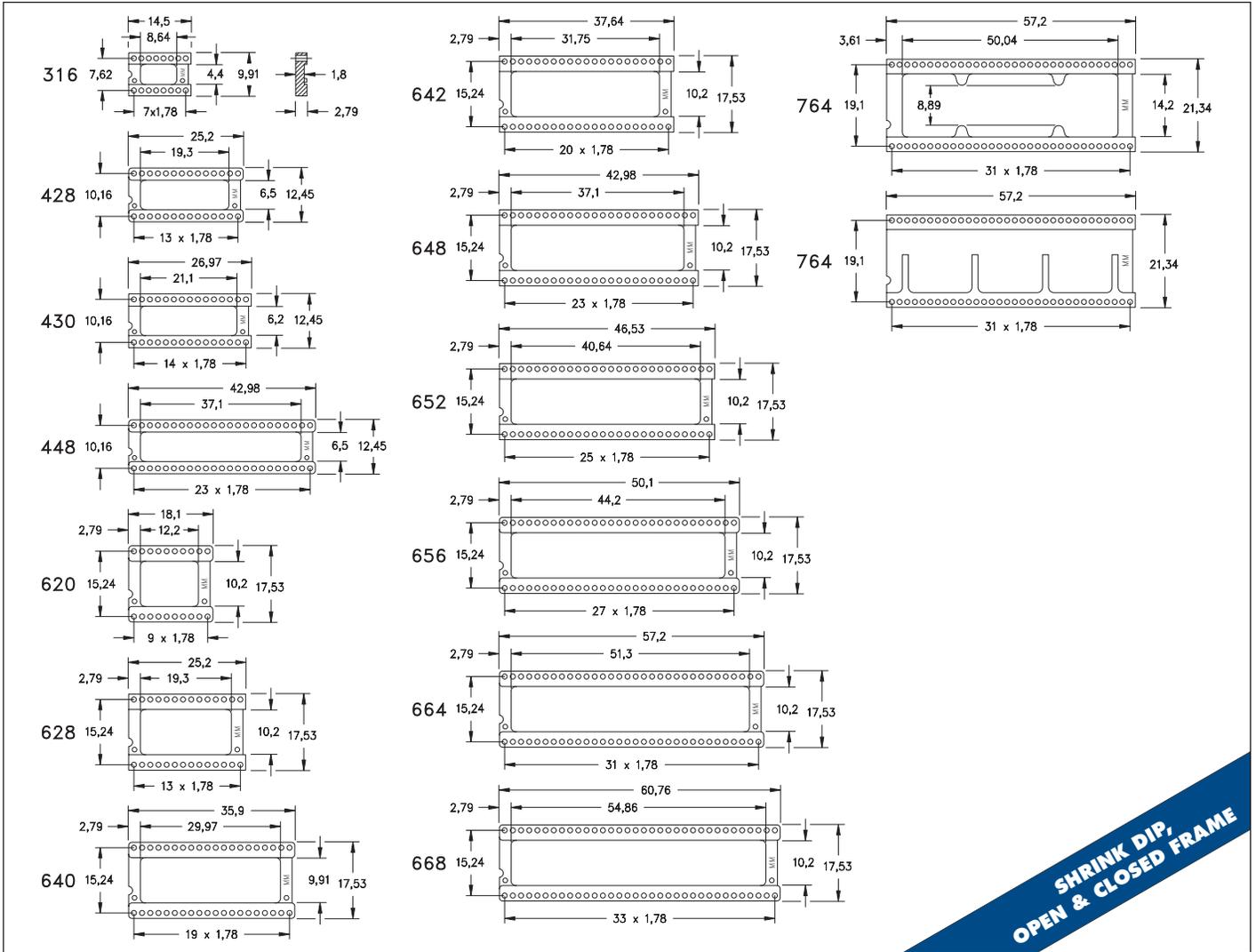
# DUAL-IN-LINE INSULATORS

## STANDARD, CLOSED FRAME • ULTRA LOW PROFILE, OPEN FRAME

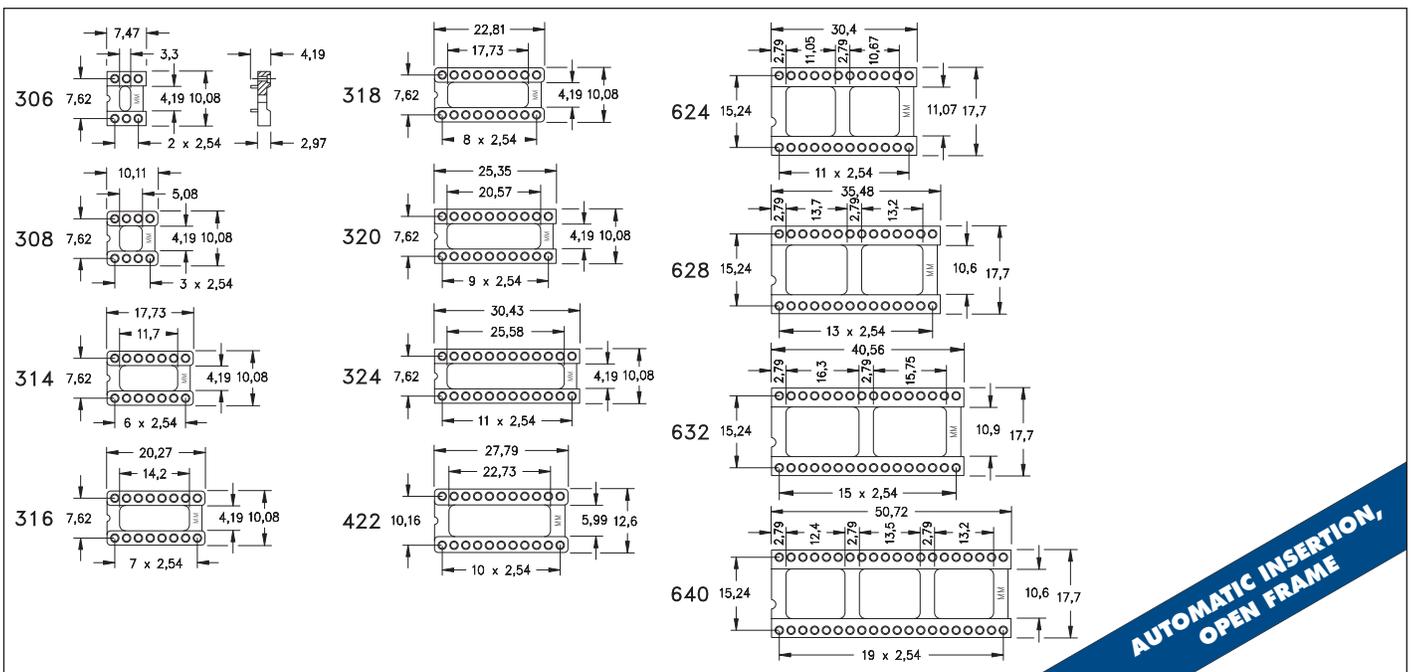


# DUAL-IN-LINE INSULATORS

## SHRINK DIP, OPEN & CLOSED FRAME • AUTOMATIC INSERTION, OPEN FRAME



**SHRINK DIP,  
OPEN & CLOSED FRAME**

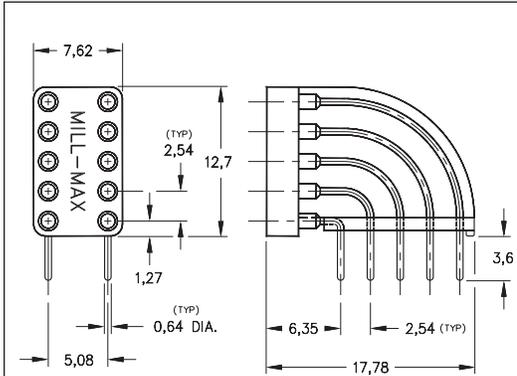


**AUTOMATIC INSERTION,  
OPEN FRAME**

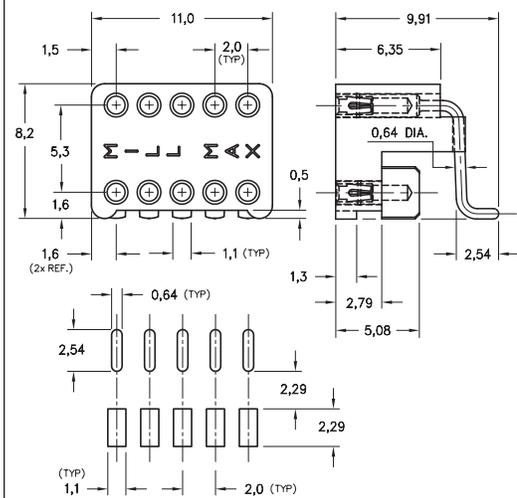


# DUAL-IN-LINE SOCKETS

## SERIES 296, 299, 594 • DISPLAY SOCKETS

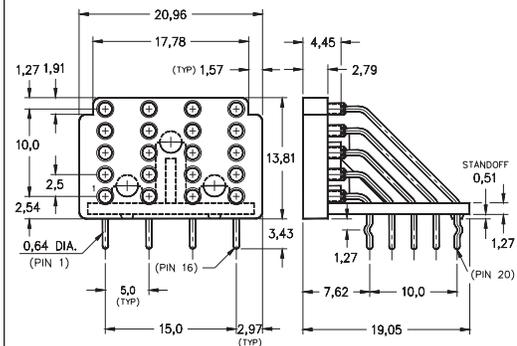


**FIG. 1**



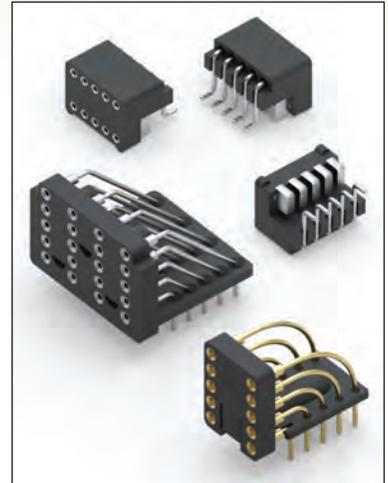
**FOOTPRINT**

**FIG. 2**



**FIG. 3**

- Series 296, 299 and 594 display sockets are used to mount dot matrix and 7-segment LED displays at the edge of and perpendicular to a printed circuit board. This positions the display directly behind the translucent front panel of the equipment
- Series 299 & 594 are through-hole mount and can be wave or intrusive reflow soldered
- Series 296 is surface mount and can be supplied on carrier tape for automated "pick 'n place" assembly
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- See also page 129 for Right Angle DIP Sockets
- Insulators are high temp. Nylon 46, suitable for all soldering processes including "lead-free"
- For Electrical, Mechanical and Environmental Data, see page 264 for details

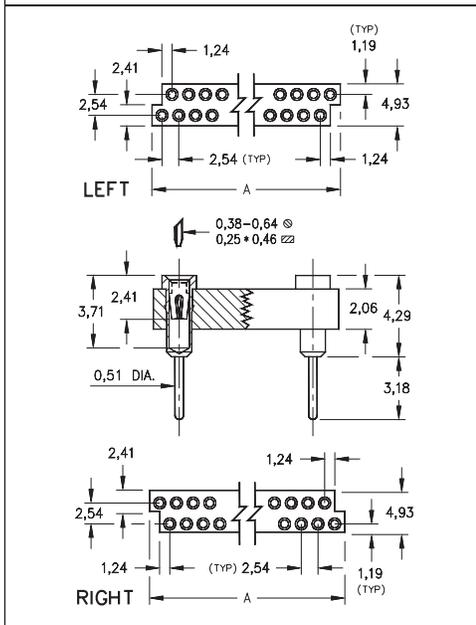
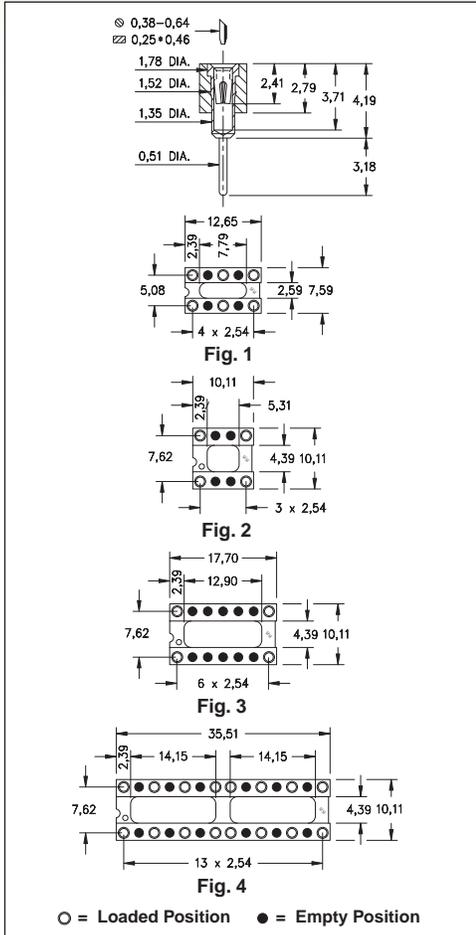


## ORDERING INFORMATION

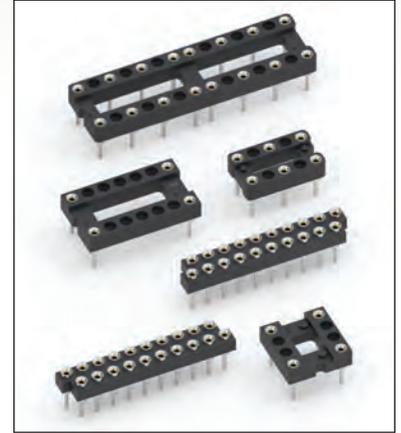
<b>FIG. 1</b>	<b>Series 299...001</b>	<b>10 Pin Vertical Display Socket</b>	
	Discrete Sockets		
	299-99-210-12-001800	Plating Code	
<b>FIG. 2</b>	<b>Series 296...691</b>	<b>10 Pin Horizontal Display Socket</b>	
	Discrete Sockets		
	296-XX-010-30-691800	Plating Code	
	<b>Series 296...692</b>	<b>10 Pin Horizontal Display Socket</b>	
Supplied on 24mm wide carrier tape per EIA-481: 450 per 330mm reel			
	296-XX-010-30-692800	Plating Code	
<b>FIG. 3</b>	<b>Series 594...007</b>	<b>20 Pin Vertical Display Socket</b>	
	Discrete Sockets		
	594-XX-020-01-007032	Plating Code	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #90EE90;">RoHS-2 2011/65/EU</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> </div>			
<b>SPECIFY PLATING CODE XX=</b>			
Sleeve (Pin)		99	44
Contact (Clip)		5,08µm Sn/Pb	5,08µm Sn
		5,08µm Sn/Pb	5,08µm Sn

# DUAL-IN-LINE SOCKETS

## SERIES 110, 410 • RELAY AND ZIG-ZAG SOCKETS



- Relay sockets accept devices with I/O pins on 2,54 grid
- Additional Relay DIP socket patterns are available on Page 135
- Zig-Zag strip sockets are suitable for IC's and memory chips with staggered double row patterns
- Series 110 and 410 use MM #1001 receptacles. See page 165 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



## ORDERING INFORMATION

Selectively Loaded Sockets For Dual-In-Line Relays		
	Number of Pins	Ordering Information
<b>FIG. 1</b>	6	110-XX-210-10-001000
<b>FIG. 2</b>	4	110-XX-308-10-001000
<b>FIG. 3</b>	4	110-XX-314-10-001000
<b>FIG. 4</b>	16	110-XX-328-10-001000

Staggered (Zig-Zag) Strip Sockets			
Dim 'A'	Number of Pins	Insulator Body	Ordering Information
18,97	14	Left, Stackable	410-XX-214-10-001000
18,97	14	Right, Stackable	410-XX-214-10-002000
21,51	16	Left, Stackable	410-XX-216-10-001000
21,51	16	Right, Stackable	410-XX-216-10-002000
26,59	20	Left, Stackable	410-XX-220-10-001000
26,59	20	Right, Stackable	410-XX-220-10-002000
31,67	24	Left, Stackable	410-XX-224-10-001000
31,67	24	Right, Stackable	410-XX-224-10-002000
36,75	28	Left, Stackable	410-XX-228-10-001000
36,75	28	Right, Stackable	410-XX-228-10-002000

XX=Plating Code  
See Below

RoHS-2  
2011/65/EU

SPECIFY PLATING CODE XX=	13	93	43
Sleeve (Pin) 	0,25µm Au	508µm Sn/Pb	5,08µm Sn
Contact (Clip) 	0,76µm Au	0,76µm Au	0,76µm Au



# DUAL-IN-LINE SOCKETS

## SERIES 110 • SELECTIVELY LOADED RELAY DIP SOCKET, SOLDER TAIL

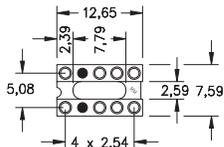
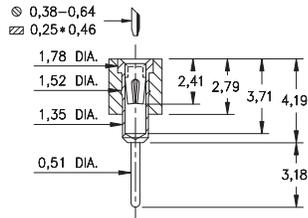


Fig. 1

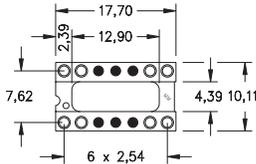


Fig. 2

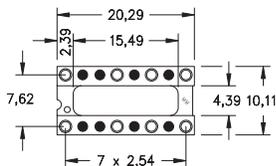


Fig. 3

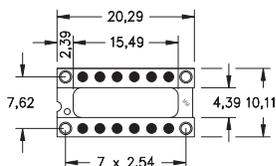


Fig. 4

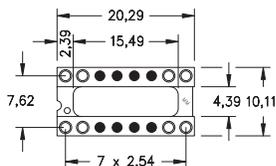


Fig. 5

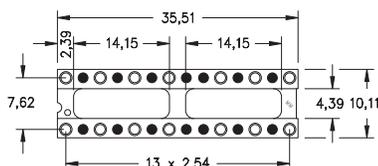


Fig. 6

○ = Loaded Position ● = Empty Position

- Relay sockets accept devices with I/O pins on 2,54 grid
- Additional Relay DIP socket patterns are available on Page 134
- Series 110 use MM #1001 receptacles. See page 165 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

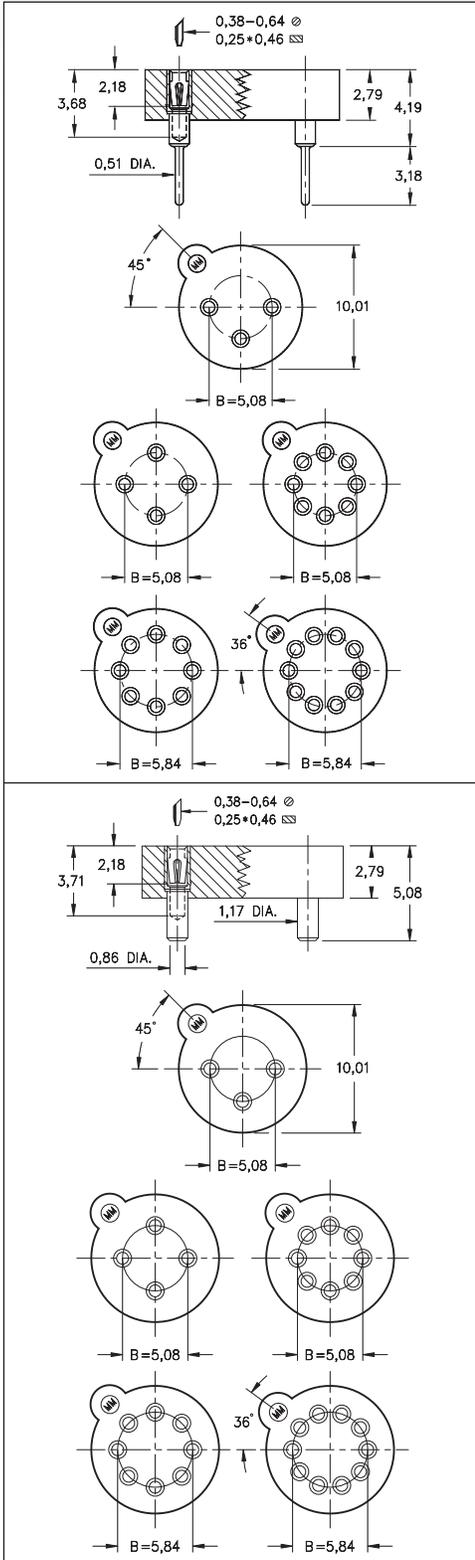


## ORDERING INFORMATION

FIG. 1	Series 110...002	8 Position Relay Socket			
		110-XX-210-10-002000			
FIG. 2	Series 110...002	8 Position Relay Socket			
		110-XX-314-10-002000			
FIG. 3	Series 110...003	8 Position Relay Socket			
		110-XX-316-10-003000			
FIG. 4	Series 110...004	4 Position Relay Socket			
		110-XX-316-10-004000			
FIG. 5	Series 110...005	8 Position Relay Socket			
		110-XX-316-10-005000			
FIG. 6	Series 110...002	14 Position Relay Socket			
		110-XX-328-10-002000			
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;">XX=Plating Code See Below</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">RoHS-2 2011/65/EU</div> </div>					
SPECIFY PLATING CODE XX=		13	93		43
Sleeve (Pin)		0,25µm Au	5,08µm Sn/Pb		5,08µm Sn
Contact (Clip)		0,76µm Au	0,76µm Au		0,76µm Au

# TRANSISTOR SOCKETS

## SERIES 917 • SURFACE AND THROUGH-HOLE MOUNT



- Series 917 TO package sockets are available in 3, 4, 8 and 10 positions
- Two 8 pin versions feature pin centers on 5,08 or 5,84 circle
- Series 917...005 use MM #1705 and MM #1802 pins, see pages 168 and 169 for details. Receptacles use Hi-Rel, 4 finger #30 contact rated at 3 amps. See page 253 for details
- Series 917...001 uses MM #1701 pins. See page 171 for details. Receptacles use Hi-Rel, 4 finger #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



## ORDERING INFORMATION

### Transistor Sockets (Through-Hole Mount)

Type	Circle Dia.	Number of Pins	Ordering Information
TO-5	5,08	3	917-XX-103-41-005000
TO-5	5,08	4	917-XX-104-41-005000
TO-5	5,08	8	917-XX-108-41-005000
TO-100	5,84	8	917-XX-208-41-005000
TO-100	5,84	10	917-XX-210-41-005000

### Transistor Sockets (Surface Mount)

Type	Circle Dia.	Number of Pins	Ordering Information
TO-5	5,08	3	917-XX-103-41-001000
TO-5	5,08	4	917-XX-104-41-001000
TO-5	5,08	8	917-XX-108-41-001000
TO-100	5,84	8	917-XX-208-41-001000
TO-100	5,84	10	917-XX-210-41-001000

### Tape and Reel Packaging: (Surface Mount ONLY)

**Ordering Information:** 917-XX-XXX-41-001799

Available on 24mm wide tape, 730 parts per 330mm reel

XX=Plating Code  
See Below

RoHS-2  
2011/65/EU

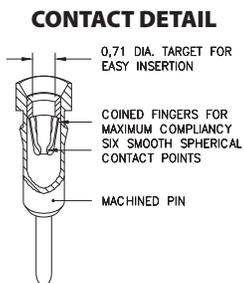
SPECIFY PLATING CODE XX=	91	93	41	43	47
Sleeve (Pin) 	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn	5,08µm Sn	5,08µm Sn
Contact (Clip) 	0,25µm Au	0,76µm Au	0,25µm Au	0,76µm Au	Au Flash

# PIN GRID ARRAY SOCKETS

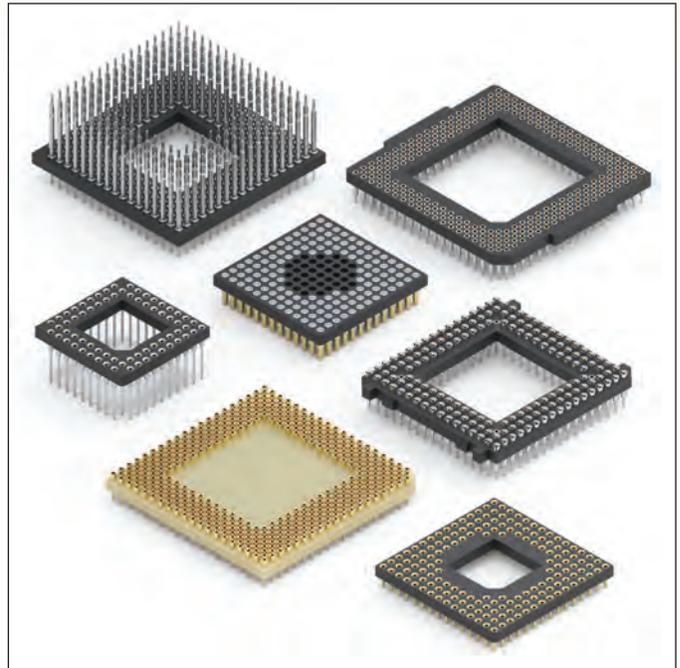
## TECHNICAL SPECIFICATIONS

Pin grid array sockets are designed to accept high pin count IC's. They use low force 6-finger contacts to ease insertion / extraction of the device. Standard low force (MM #32) contact is used for pin counts up to 150, ultra-low force (MM #35) contact is recommended for 150 pins or more but less than 250 pins. The "ultra lite" (MM #43) is recommended for 250 pins or more.

PGA sockets all have precision-machined pins. This offers the lowest possible profile. The closed bottom design also eliminates flux and solder contamination, and the pins are in-line with contact entry.



Insulator bodies are molded from high temperature PCT polyester suitable for all forms of soldering including wave, infra-red reflow and vapor phase.



### TECHNICAL SPECIFICATIONS

#### Materials

##### Insulator body:

- High temperature glass-filled thermoplastic polyester (PCT)
- Heat deflection temperature (HDT @ 264 PSI) = 255°C (490°F)
- Self-extinguishing, rated UL94V-0

##### Receptacle (Sleeve):

- Screw machined brass (ASTM-B16-00), plated 0,25µm gold, 5,08µm tin or 5,08µm tin-lead (SnPb 90/10) over 2,54µm nickel.

##### Pin:

- Screw machined brass (ASTM-B16-00), plated 0,25µm gold, 5,08µm tin or 5,08µm tin-lead (SnPb 90/10) over 2,54µm nickel.

##### Contact (clip):

- Stamped beryllium-copper (ASTM-B194-01), plated 0,25µm or 0,76µm gold over 1,27µm nickel.

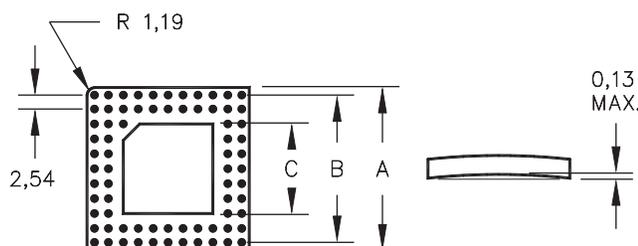
#### Mechanical Data

- Insertion characteristics:
  - Measured with a polished steel gauge 0,46 diameter
  - Low force MM#32 (01 suffix) typical insertion force 50 grams typical extraction force 30 grams
  - Ultra-low force MM#35 (02 suffix) typical insertion force 25 grams typical extraction force 15 grams
  - "Ultra lite" MM#43 (03 suffix) typical insertion force 12.5 grams typical extraction force 7.5 grams
- Mechanical life: 100 cycles min.

#### Electrical & Environmental Data

- See general specifications on page 264.

### DIMENSIONS OF PGA SOCKET INSULATORS



DIMENSIONS A, B, and C can be calculated as follows:

**N1** = GRID SIZE (# of pins per side, outer most row only for interstitial patterns)

**N2** = WINDOW SIZE

**A** = N1 X 2,54

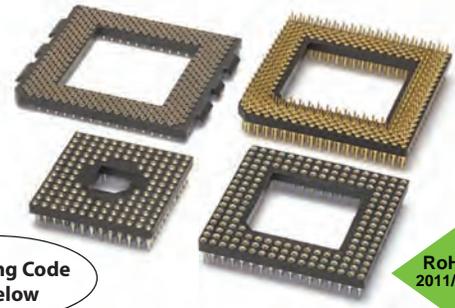
**B** = (N1-1) X 2,54

**C** = (N2 X 2,54) - 0,41

# PIN GRID ARRAY SOCKETS

**SERIES 510, 511, 513, 514, 515, 518, 522, 523 • 2,54 AND INTERSTITIAL GRID • SURFACE MOUNT, THROUGH-HOLE AND WIREWRAP**

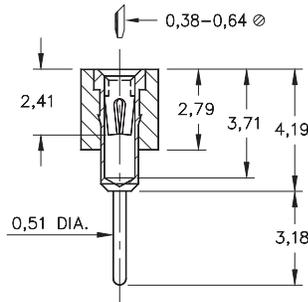
- Series 510, 511, 514, 515, 522 and 523 PGA sockets are available on 2,54 centers
- Series 513 and 518 PGA sockets are available for Interstitial patterns
- Choice of three low force clips to cover all applications
- High temperature PCT polyester insulator material suitable for all forms of soldering including lead-free
- For Electrical, Mechanical and Environmental Data, see page 137 for details



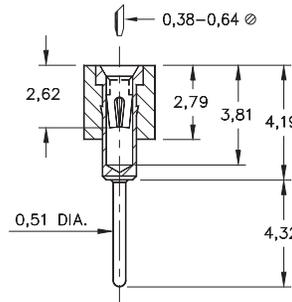
**XX=Plating Code  
See Below**



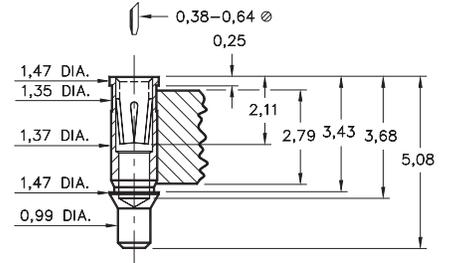
### SERIES 510 (Standard Solder Tail)



### SERIES 511 (Long Solder Tail)

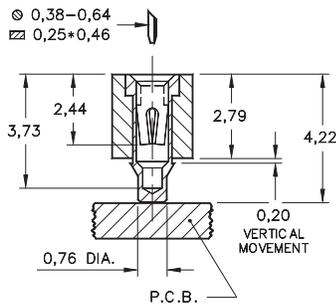


### SERIES 513 (SMT Receptacle)

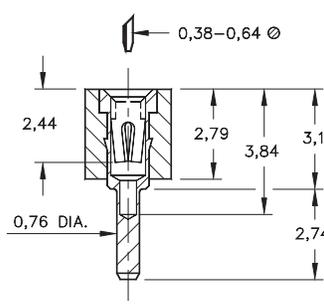


Interstitial Patterns Only

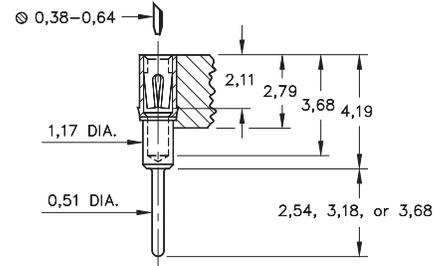
### SERIES 514 (SMT Receptacle)



### SERIES 515 (Low Profile Solder Tail)

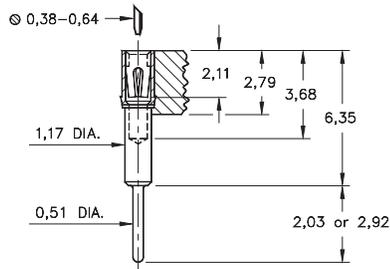


### SERIES 518 (Solder Tail No, Heatsink Tabs)



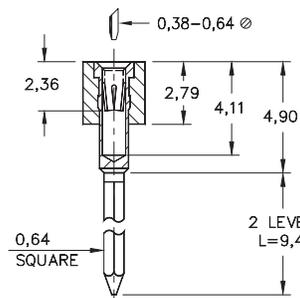
Interstitial Patterns Only

### SERIES 518 (Solder Tail w/ Heatsink Tabs)

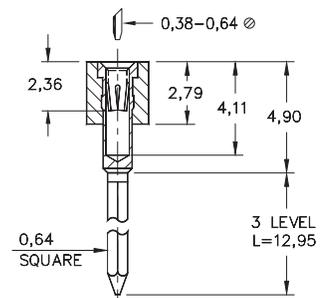


Interstitial Patterns Only

### SERIES 522 (2 Level Wrapost)



### SERIES 523 (3 Level Wrapost)



Visit [www.mill-max.com/pgs](http://www.mill-max.com/pgs) to configure a formal part number

SPECIFY PLATING CODE XX=	13	91	93	99	43
Sleeve (Pin) 	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn/Pb	5,08µm Sn
Contact (Clip) 	0,76µm Au	0,25µm Au	0,76µm Au	2,54µm Sn/Pb	0,76µm Au

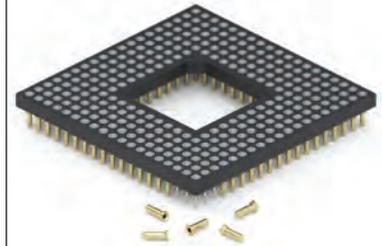
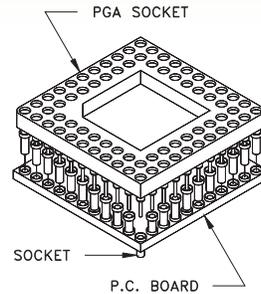


# PIN GRID ARRAY SOCKETS

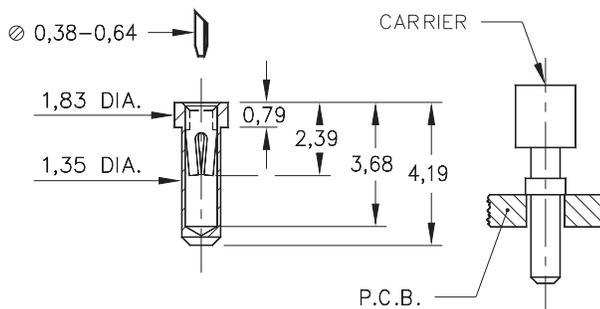
## SERIES 605, 614 • 2,54 AND INTERSTITIAL GRID • CARRIER TYPE

- Series 614 & 605 PGA carrier sockets offer 4 receptacle styles
- Many combinations of receptacles and clips to cover all applications
- Carrier sockets provide a convenient way of loading groups of receptacles onto a PC board
- Removeable insulator makes carriers ideal for low profile applications
- High temperature PCT polyester insulator material suitable for all forms of soldering including lead-free
- For Electrical, Mechanical and Environmental Data, see page 137 for details

### APPLICATION OF PGA SOCKET CARRIERS

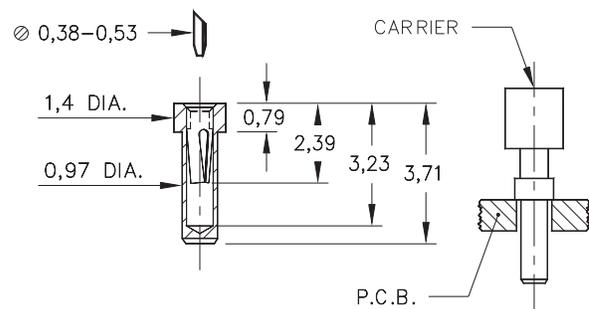


### SERIES 614...001, 002, 003 LOW PROFILE SOCKET

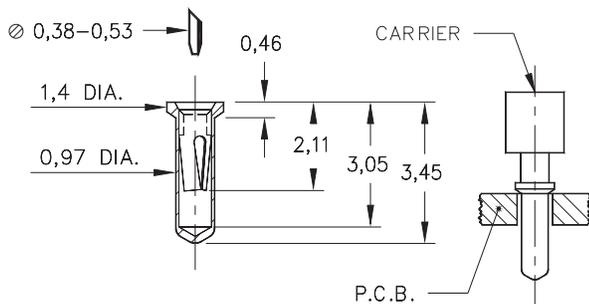


For .100" Grid Only

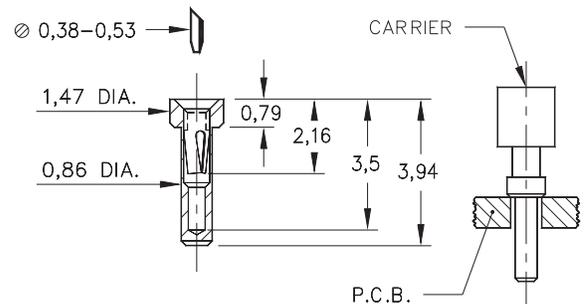
### SERIES 614...007 MINIATURE SOCKET



### SERIES 614...012 LOWEST PROFILE SOCKET



### SERIES 605...048 REDUCED BARREL SOCKET



XX=Plating Code  
See Below

RoHS-2  
2011/65/EU

Visit [www.mill-max.com/pga](http://www.mill-max.com/pga)  
to configure a formal part number

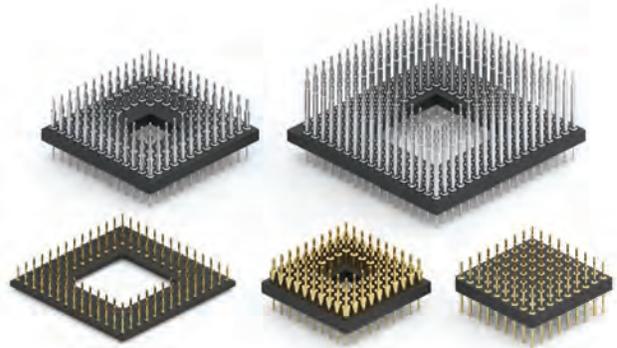
SPECIFY PLATING CODE XX=	13	93	43
Sleeve (Pin) 	0,25µm Au	5,08µm Sn/Pb	5,08µm Sn
Contact (Clip) 	0,76µm Au	0,76µm Au	0,76µm Au



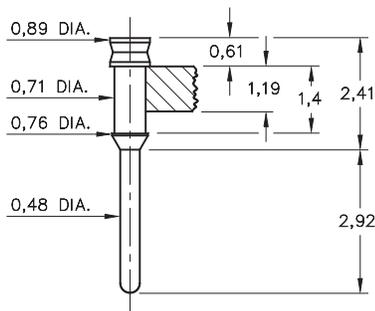
# PIN GRID ARRAY HEADERS

**SERIES 507, 550, 551, 599 • 2,54 AND INTERSTITIAL GRID • SURFACE MOUNT AND THROUGH-HOLE**

- Series 551 and 599 headers are available on 2,54 centers
- Series 507 and 550 PGA headers are available for interstitial patterns and designed for SMT adapter applications
- Series 550 and 551 are through-hole mount for adapter & board stacking applications
- Series 550 and 551 use High temperature PCT polyester insulator material suitable for all forms of soldering
- Series 507 and 599 use FR-4 epoxy insulator material
- For Electrical, Mechanical and Environmental Data, see page 137 for details

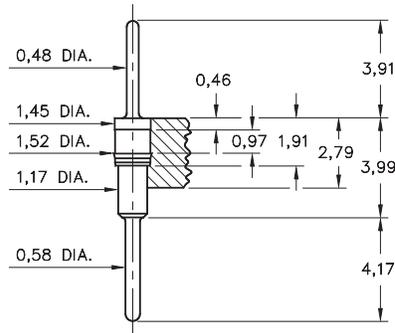


**SERIES 507**  
SMT HEADER PIN TYPE #0737



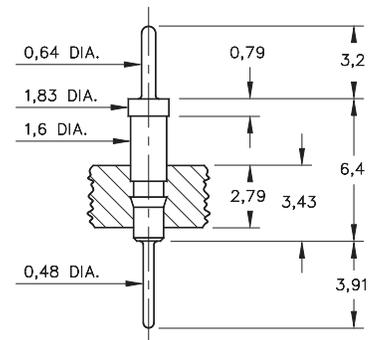
Interstitial Patterns Only

**SERIES 550**  
HEADER PIN TYPE #5012

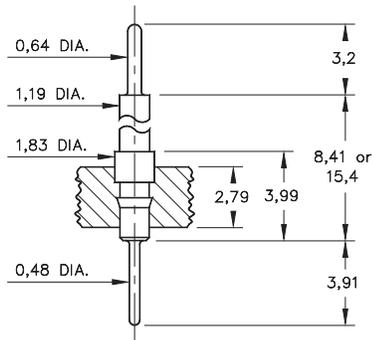


Interstitial Patterns Only

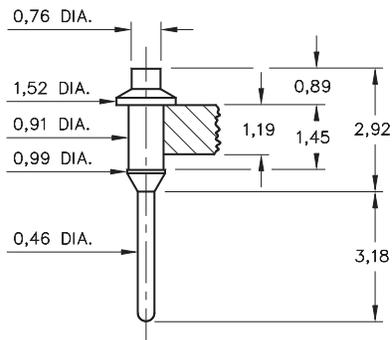
**SERIES 551**  
HEADER PIN TYPE #5503



**SERIES 551**  
HEADER PIN TYPE #5504 & #5505



**SERIES 599**  
SMT HEADER PIN TYPE #9976



XX=Plating Code  
See Below

RoHS-2  
2011/65/EU

Visit [www.mill-max.com/pga](http://www.mill-max.com/pga) to configure a formal part number

**SPECIFY PLATING CODE XX =**

10

90

40

Pin Plating



0,25µm Au

5,08µm Sn/Pb

5,08µm Sn



# SERIES 540, 579, 582, 587, 599, 940 BGA AND PLCC SPECIFICATIONS

## TECHNICAL SPECIFICATIONS FOR BGA ADAPTER SYSTEM

### Materials:

- Socket contact: Three finger, stamped beryllium copper alloy 172, HT (Mill-Max type #04 or #05); plated 0,25 $\mu$ m gold over 1,27 $\mu$ m nickel.
- Socket shell and adapter pins: Precision machined brass alloy; plated 0,25 $\mu$ m gold over 2,54 $\mu$ m nickel.
- Insulator material: 1,19 or 1,57 thick glass-epoxy type FR-4, rated UL94V-0. TCE = 10-13ppm/ $^{\circ}$ C,  $\epsilon_r$  = 5.0

### Mechanical:

- Insertion and withdrawal forces (using 0,25 dia. polished steel gage pin): Insertion: .36N typ. per pin  
Withdrawal: .20N typ. per pin
- Insertion force of an actual 225 pin device: 90N
- Durability: 100 cycles
- Coplanarity: less than or equal to 0,13

### Electrical:

- Current rating (per pin): 1A
- Working voltage: 100 VRMS/150 VDC max.
- Low level contact resistance: 10 m $\Omega$  max.
- Insulation resistance @ 500 VRMS: Initial value: 1,000,000 M $\Omega$  min.  
After climatic tests: 10,000 M $\Omega$  min.

- Dielectric withstanding voltage: 500 VRMS
- Capacitance between adjacent contacts: 1 pF max.
- Self inductance per pin: 2 nH max.
- Electrical length: 31 pS

### Environmental:

- Operating temperature range: -55  $^{\circ}$ C to +125  $^{\circ}$ C  
BGA adapter/socket systems have withstood the following environmental tests without mechanical or electrical failure:
- Damp heat, steady state: 40  $^{\circ}$ C, 93% rH, 21 days
- Damp heat, cyclic: 25/55  $^{\circ}$ C, 6 days
- Dry heat: 100 $^{\circ}$ C, 1,000 hours
- Thermal shock: -55 to +125  $^{\circ}$ C, 5 cycles
- Random vibration: 50 to 500 Hz, 8g, 20 min. per axis
- Shock: 50 g per axis
- Solderability: 235  $^{\circ}$ C, 2 seconds
- Resistance to soldering heat: 270  $^{\circ}$ C, 10 seconds
- Resistance to corrosion:
- Salt spray: 48 hours
- Sulphur dioxide: 96 hours @ 25 ppm SO<sub>2</sub>, 25  $^{\circ}$ C, 75% rH
- Hydrogen sulphide: 96 hours @ 12 ppm H<sub>2</sub>S, 25 $^{\circ}$ C, 75% rH

## TECHNICAL SPECIFICATIONS FOR 540 SERIES PLCC SOCKETS

### Materials:

- Insulator: Glass filled thermoplastic, self-extinguishing rated, UL94V-0, color black.
- Contact: Plated copper alloy overall nickel underplating, tin finish.

### Mechanical Data:

- Contact pressure (per contact): 150 grams min.
- Mechanical data (cycles): 50 cycles min.

### Electrical Data:

- Rated current: SMD types: 1A  
Through-hole types: 2A
- Contact resistance: 20 m $\Omega$  max.
- Insulation resistance: 5,000 M $\Omega$  min.
- Dielectric strength: 600 VRMS
- Capacitance: 2pF max.

### Environmental Data:

- Operating temperature: -55/+125  $^{\circ}$ C
- Vibration (No electrical discontinuity greater than 1 $\mu$ s): 10-2000 HZ, 15 g
- Climactic category (EIA): 365-17A

## TECHNICAL SPECIFICATIONS FOR 940 SERIES PLCC SOCKETS

### Materials:

- Insulator: PPS Polyphenylene Sulfide, Rated UL94V-0.
- Contact: Phosphor Bronze with a tin finish and nickel underplate.

### Mechanical Data:

- Contact pressure (per contact): 150 grams min.
- Mechanical data (cycles): 25 cycles min.

### Electrical Data:

- Rated current: SMD types: 1A  
Through-hole types: 1A
- Contact resistance: 30 m $\Omega$  max.
- Insulation resistance: 10,000 M $\Omega$  min.
- Dielectric strength: 600 VAC
- Capacitance: 1pF max.

### Environmental Data:

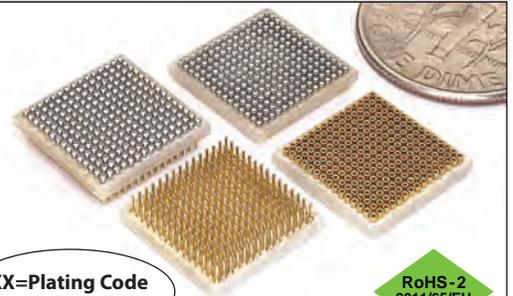
- Operating temperature: -55/+105  $^{\circ}$ C
- Vibration (No electrical discontinuity greater than 1 $\mu$ s): 10-2000 HZ, 15 g
- Climactic category (EIA): 365-17A



# BALL GRID ARRAYS

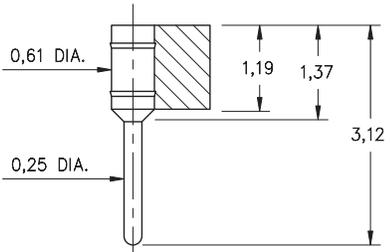
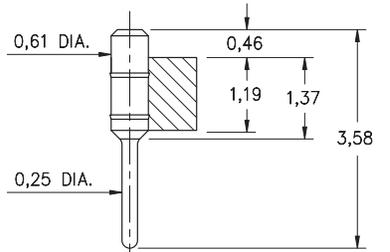
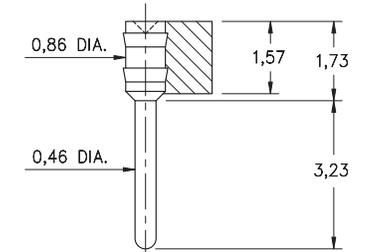
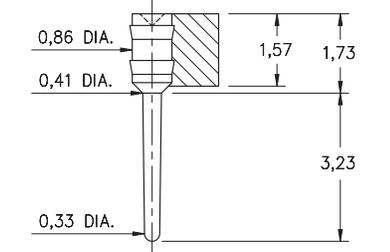
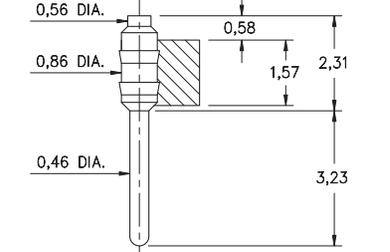
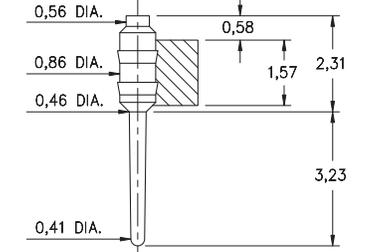
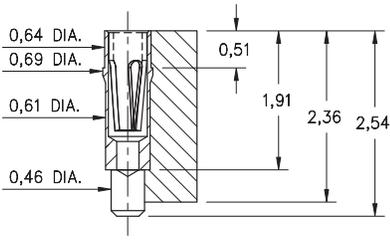
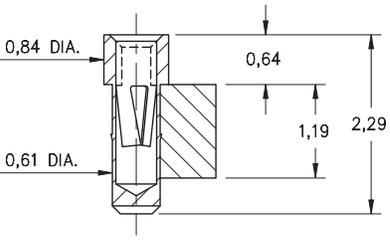
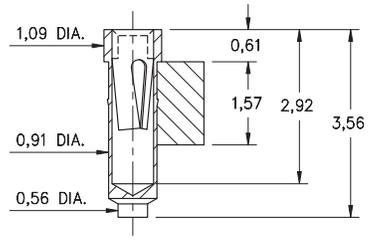
## SERIES 540,579,582,587,599 • FOR 0,8mm GRID, 1mm GRID & 1,27mm GRID • MALE PIN ADAPTERS AND FEMALE SOCKETS

- BGA adapter/socket systems are a reliable way to make BGAs pluggable. They may also be used as a high density board-to-board interconnect
- The BGA device for a 0,8mm or 1mm grid is soldered to a 9929 adapter (or a 7929 adapter is soldered to a PCB), then either one can be plugged into a 9953 (0.8mm grid) or 9928 (1mm grid) surface mount socket
- The BGA device for a 1,27mm grid is soldered to a 8737/4048 adapter (or a 4098/4054 adapter is soldered to a PCB), then either one can be plugged into a 8214 surface mount socket
- Both socket and adapter have the same footprint as the BGA device
- Insertion force is .4N per pin for standard pins 7929/9929, 8737/4098. Tapered EZ-IN pins 4048/4054 reduce insertion force to only .08N, and are recommended for pin counts greater than 500
- Insulator material is FR-4 epoxy having a TCE to match the BGA device and circuit board
- For Electrical, Mechanical and Environmental Data, see page 141 for details



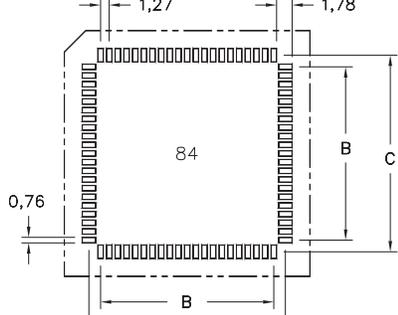
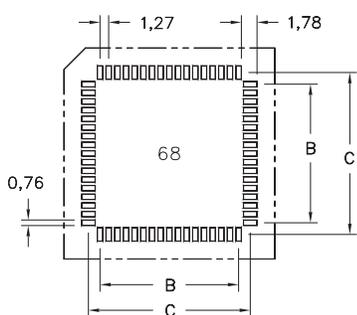
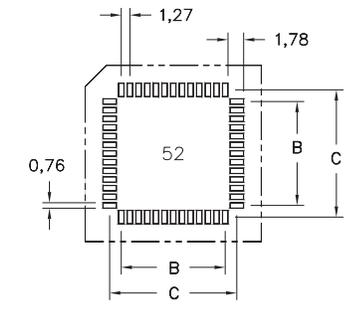
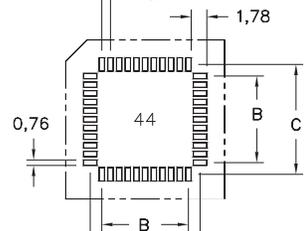
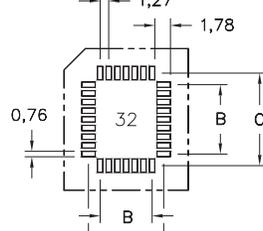
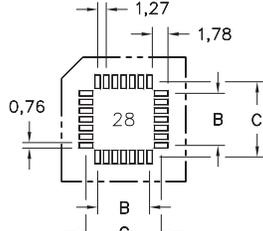
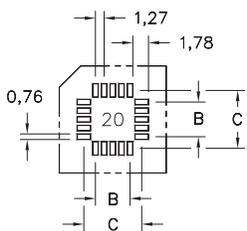
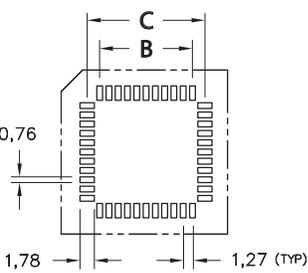
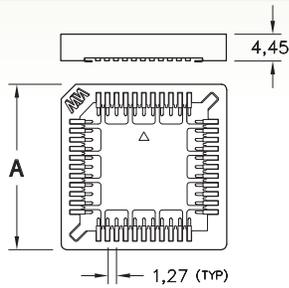
XX=Plating Code  
See Below

RoHS-2  
2011/65/EU

<p><b>SERIES 599...429</b> BGA MOUNT TYPE #9929</p>  <p>For 0,8mm &amp; 1mm Grid Only</p>	<p><b>SERIES 579...429</b> PCB MOUNT TYPE #7929</p>  <p>For 0,8mm &amp; 1mm Grid Only</p>	<p><b>SERIES 587...437</b> BGA MOUNT TYPE #8737</p>  <p>For 1,27 Grid Only</p>
<p><b>SERIES 540...448</b> EZ-IN BGA MOUNT TYPE #4048</p>  <p>For 1,27 Grid Only</p>	<p><b>SERIES 540...498</b> STANDARD PCB MOUNT TYPE #4098</p>  <p>For 1,27 Grid Only</p>	<p><b>SERIES 540...454</b> EZ-IN PCB MOUNT TYPE #4054</p>  <p>For 1,27 Grid Only</p>
<p><b>SERIES 599...453</b> SURFACE MOUNT TYPE #9953</p>  <p>For 0,8mm Grid Only</p>	<p><b>SERIES 599...428</b> SURFACE MOUNT TYPE #9928</p>  <p>For 1mm Grid Only</p>	<p><b>SERIES 582...414</b> SURFACE MOUNT TYPE #8214</p>  <p>For 1,27 Grid Only</p>
<p>Visit <a href="http://www.mill-max.com/bga">www.mill-max.com/bga</a> to configure a formal part number</p>	<p><b>SPECIFY PLATING CODE XX =</b> 11 </p> <p>Sleeve (Pin)  0,25µm Au</p> <p>Contact (Clip)  0,25µm Au</p>	<p><b>SPECIFY PLATING CODE XX =</b> 10 </p> <p>Pin Plating  0,25µm Au</p>

# STANDARD PLCC SOCKETS

## SERIES 940 • SURFACE MOUNT



RECTANGULAR \*

- Note: Not end stackable
- Accepts JEDEC PLCCs MO-047 and MO-052
- Low profile for high density PC board stacking
- Standoffs provide clearance for heat dissipation and cleaning
- Contacts are plated with 3,81µm tin
- Insulator material is glass reinforced PPS
- For Electrical, Mechanical and Environmental Data, see page 141 for details



### PCB LAYOUT FOR SURFACE MOUNT

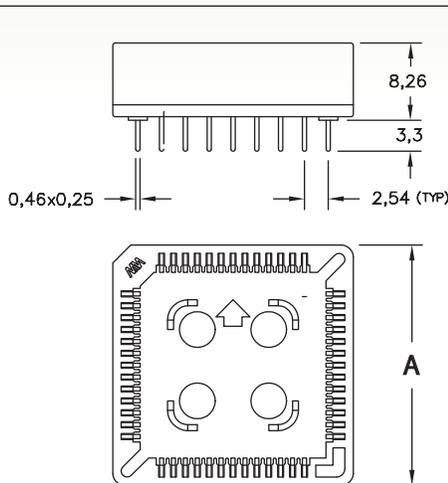
Number of Contacts	Ordering Information	- A -	- B -	- C -	Qty. per Tube Reel	
20	940-44-020-17-40000X	15,57	5,08	8,48	32	470
28	940-44-028-17-40000X	18,11	7,62	11,02	27	390
32 *	940-44-032-17-40000X *	20,6 / 18,1	10,2 / 7,62	13,6 / 11,0	24	390
44	940-44-044-17-40000X	22,86	12,7	16,10	21	250
52	940-44-052-17-400004 (Only)	25,73	15,24	18,64	19	250
68	940-44-068-17-40000X	30,81	20,32	23,72	16	220
84	940-44-084-17-40000X	35,89	25,4	28,80	14	200

Packaging Codes: X = 0 (Tubes)  
X = 4 (Tape & Reel)



# STANDARD PLCC SOCKETS

## SERIES 940 • THROUGH-BOARD MOUNT

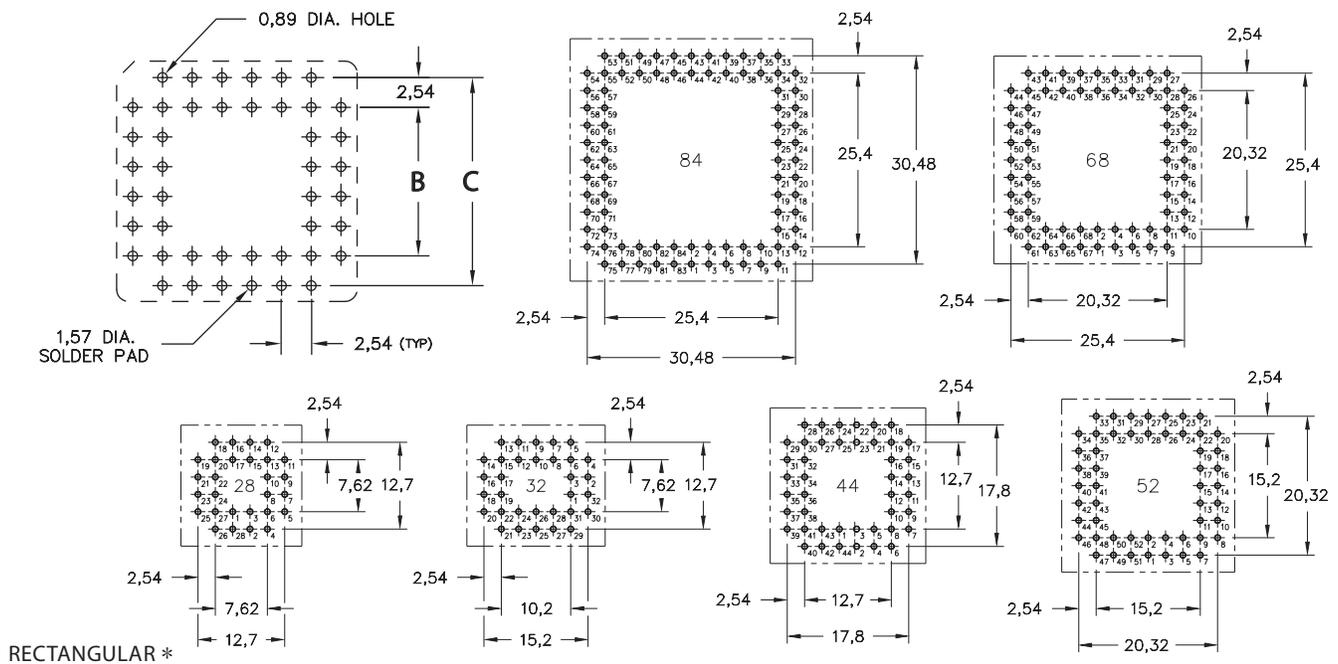


- Note: Not end stackable
- Accepts JEDEC PLCCs MS-016 & MS-018 leaded plastic substrates
- Internal standoffs insure proper positioning of chip carrier in socket
- Standoffs provide clearance for heat dissipation and cleaning
- Contacts are plated with 3,81  $\mu$ m tin
- Insulator material is glass reinforced PPS
- For Electrical, Mechanical and Environmental Data, see page 141 for details



### PRINTED CIRCUIT DRILLING PATTERNS (TOP VIEW)

0,89 dia. min. mounting holes



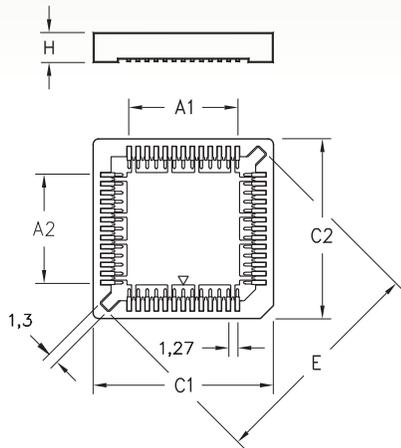
RECTANGULAR \*

Number of Contacts	Ordering Information	- A -	- B -	- C -	Quantity per Tube
20	940-44-020-24-000000	15,57	5,08	10,16	38
28	940-44-028-24-000000	18,11	7,62	12,7	33
32 *	940-44-032-24-000000 *	20,7 / 18,1	10,2 / 7,62	15,2 / 12,7	29
44	940-44-044-24-000000	23,19	12,7	17,8	26
52	940-44-052-24-000000	25,73	15,24	20,32	23
68	940-44-068-24-000000	30,81	20,32	25,4	19
84	940-44-084-24-000000	35,89	25,4	30,48	16
100	940-44-100-24-000000	40,72	30,48	35,56	25
	Plating Code 44 $\blacklozenge$ = 150 $\mu$ m Sn				

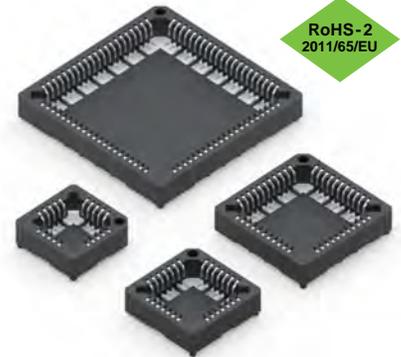


# COMPACT PLCC SOCKETS

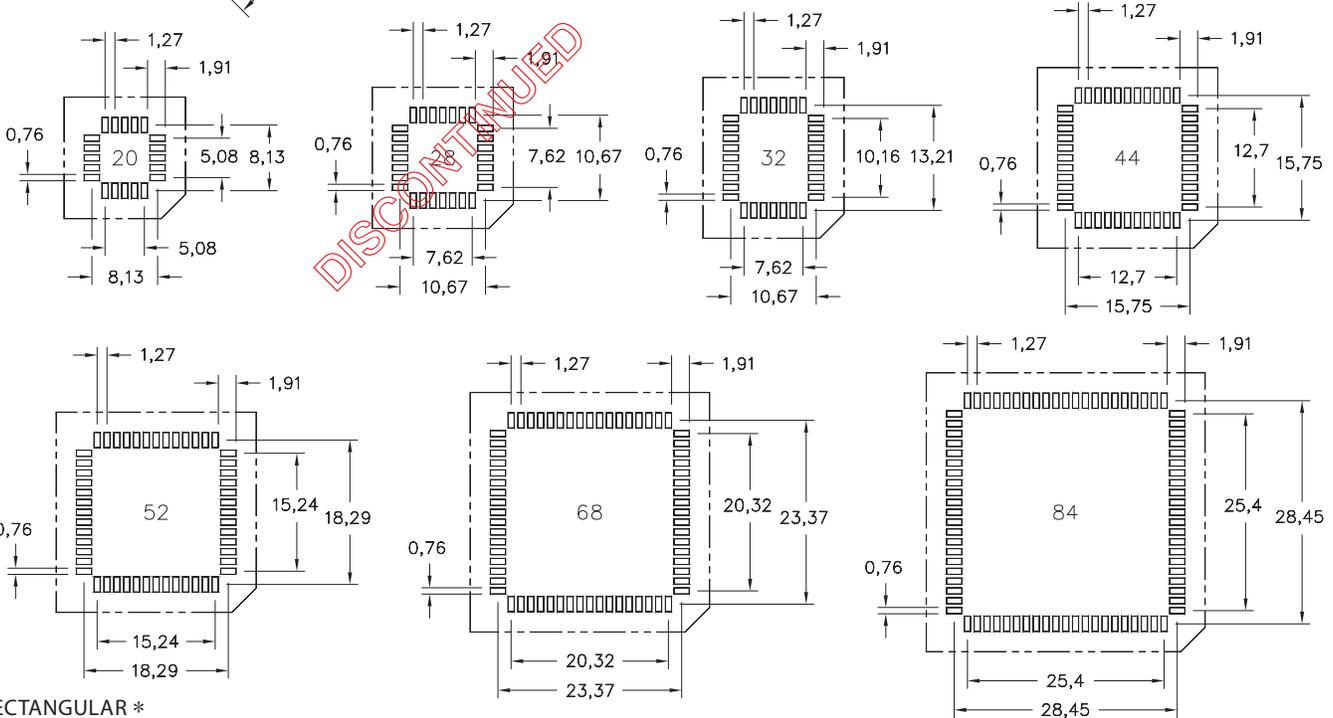
## SERIES 540 • SURFACE MOUNT



- Note: Not end stackable
- Designed for JEDEC type devices
- Open frame design in solder area improves results of IR soldering and facilitates visual inspection of solder pads
- Contacts are plated with 3,81µm tin
- The insulator is molded PPS (Ryton R-4)
- For Electrical, Mechanical and Environmental Data, see page 141 for details



### PCB LAYOUT FOR SURFACE MOUNT



RECTANGULAR \*

Number of Contacts	Ordering Information	- A1 -	- A2 -	- C1 -	- C2 -	- E -	- H -	Qty. per Tube	Tape Width mm	Qty. per Reel
20	540-44-020-17-40000X	5,08	5,08	14,86	14,86	16,69	4,57	34	24	490
28	540-44-028-17-40000X	7,62	7,62	17,02	17,02	20,29	4,57	29	32	400
32 *	540-44-032-17-40000X *	7,62	10,16	17,02	19,56	22,48	3,76	26	32	400
44	540-44-044-17-40000X	12,7	12,7	22,48	22,48	27,48	4,57	22	44	250
52	540-44-052-17-40000X	15,24	15,24	25,4	25,4	31,09	4,57	20	44	250
68	540-44-068-17-40000X	20,32	20,32	30,53	30,53	38,28	4,57	16	44	220
84	540-44-084-17-40000X	25,4	25,4	35,56	35,56	45,49	4,57	14	56	200

Packaging Codes: X = 0 (Tubes)  
X = 4 (Tape & Reel)



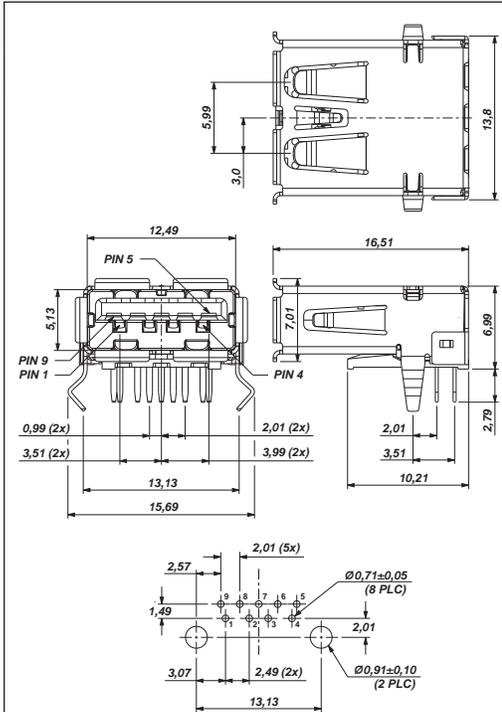


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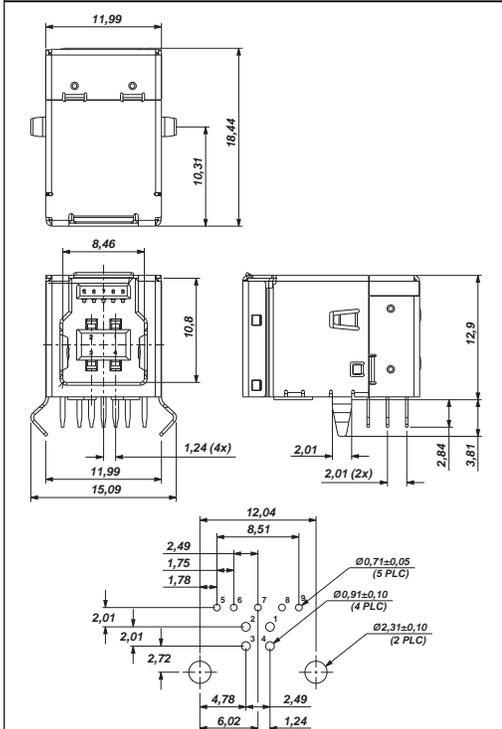
# IO SOCKETS



## SERIES 896, 897 • UNIVERSAL SERIAL BUS 3.0 • SOCKETS



**FIG. 1**



**FIG. 2**

- USB 3.0 receptacles for through-hole mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully shielded
- Fully backwards compatible with USB 2.0
- 10X faster than USB 2.0 and provides optimized power efficiency
- Packaged in trays:  
896-46-009-90-300000 - 100 pieces per tray  
897-46-009-90-300000 - 80 pieces per tray



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>USB 3.0 Type A Receptacle, Single, Through-Hole</b>
	896-46-009-90-300000
<b>FIG. 2</b>	<b>USB 3.0 Type B Receptacle, Single, Through-Hole</b>
	897-46-009-90-300000

### Technical Specifications

#### Materials:

Terminals: Copper Alloy, Tin-Plated  
 Contacts: Copper Alloy, Gold Flash over PdNi  
 Casing and Shield: Stainless Steel  
 Insulator material: High temperature thermoplastic rated UL94V-0



#### Ratings:

Voltage: 30VAC (rms)  
 Current: 1.5A PWR/GND pins  
 All housing materials rated for "lead-free" soldering up to 260° C

#### Electrical:

Contact resistance: 30mΩ max. for power and ground pins  
 50mΩ max. for all others  
 Insulation resistance: 100MΩ min.  
 Dielectric withstanding voltage: 100VAC at sea level  
 Capacitance: 2pF max.

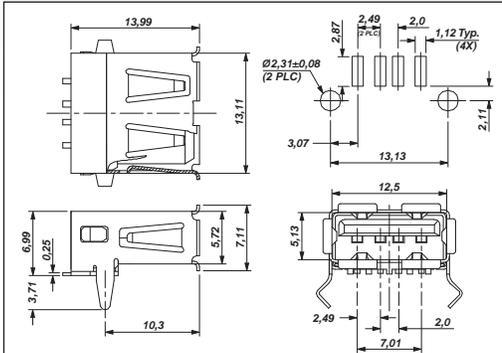
#### Mechanical:

Random vibration: No discontinuity >1μs per EIA 364-28, cond. VII, letter D  
 Physical shock: No discontinuity >1μs per EIA 364-27, condition H  
 Durability: 5000 cycles min. per EIA 364-09  
 Mating force: 35 Newtons max. per EIA 364-13  
 Unmating force: Initial - 10 Newtons min. per EIA 364-13  
 After test - 8 Newtons min. per EIA 364-13

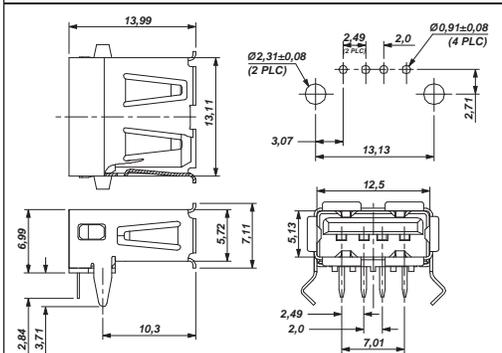
#### Environmental:

Thermal shock per EIA 364-32, condition I  
 Humidity per EIA 364-31  
 Temperature life per EIA 364-17, method A  
 Solderability per EIA 364-52, category 2

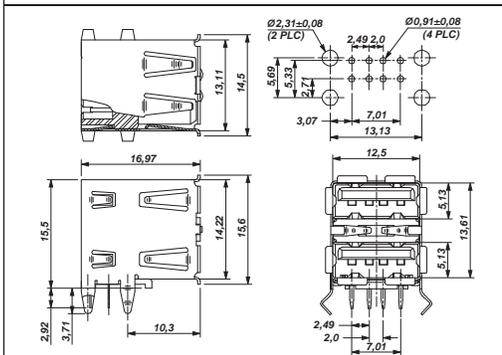
## SERIES 896, 897 • UNIVERSAL SERIAL BUS • SOCKETS



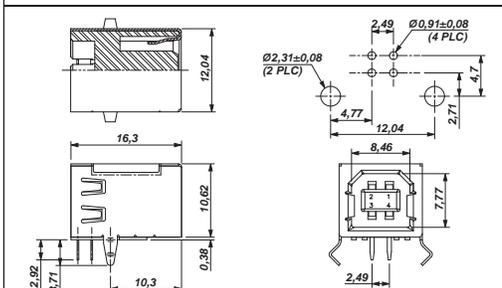
**FIG. 1**



**FIG. 2**



**FIG. 3**



**FIG. 4**

- USB receptacles for through-hole and surface mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully shielded
- Fully compatible with USB 1.0 and 2.0 specifications
- Passes 16MHz signal attenuation per ASTM-D-4566
- Packaged in trays, 150 pieces per tray



## ORDERING INFORMATION

<b>FIG. 1</b>	<b>Type A Receptacle, Single, Surface Mount</b>
	896-43-004-00-000000
<b>FIG. 2</b>	<b>Type A Receptacle, Single, Through-Hole</b>
	896-43-004-90-000000
<b>FIG. 3</b>	<b>Type A Receptacle, Double, Through-Hole</b>
	896-43-008-90-000000
<b>FIG. 4</b>	<b>Type B Receptacle, Single, Through-Hole</b>
	897-43-004-90-000000

## Technical Specifications

### Materials:

Terminals: Copper Alloy, Tin-Plated  
 Casing and Shield: Stainless Steel  
 Insulator material: High temperature thermoplastic rated UL94V-0

### Ratings:

Voltage: 30VAC (rms)  
 Current: 1A max. per contact for 30°C temperature rise  
 All housing materials rated for "lead-free" soldering up to 260° C

### Electrical:

Contact resistance: 30mΩ max.  
 Insulation resistance: 1000MΩ min.  
 Dielectric withstanding voltage: 750VAC at sea level  
 Capacitance: 2pF max.

### Mechanical:

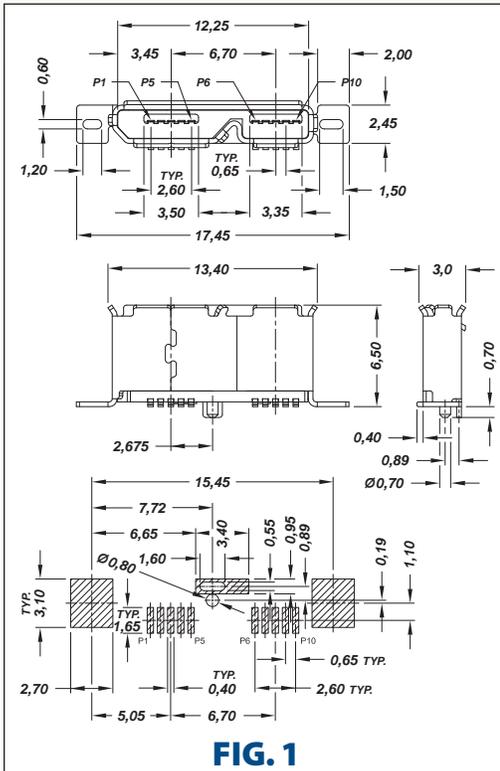
Random vibration: No discontinuity >1μs per EIA 364-28, cond. V, letter A  
 Physical shock: No discontinuity >1μs per EIA 364-27, condition H  
 Durability: 1500 cycles min. per EIA 364-09  
 Mating force: 35 Newtons max. per EIA 364-13  
 Unmating force: 10 Newtons min. per EIA 364-13

### Environmental:

Thermal shock per EIA 364-32, condition I  
 Humidity per EIA 364-31, method II, condition A  
 Temperature life per EIA 364-17, condition 3, method A



## SERIES 897 • UNIVERSAL SERIAL BUS 3.0 MICRO-B • SURFACE MOUNT SOCKETS



- USB 3.0 Micro-B receptacles for surface mount
- Reduced mounting space
- Fully shielded
- Fully backwards compatible with USB 2.0
- 10X faster than USB 2.0 and provides optimized power efficiency
- Smaller and lighter than existing USB connectors, for portable & handheld devices
- Packaged on Tape and Reel:  
897-10-010-00-300002 - 900 pieces per reel  
897-10-010-40-300002 - 1,500 pieces per reel



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Micro Type B Receptacle, Single, Vertical Surface Mount</b>
	897-10-010-00-300002
<b>FIG. 2</b>	<b>Micro Type B Receptacle, Single, Surface Mount</b>
	897-10-010-40-300002

### Technical Specifications

#### Materials:

Terminals: Copper Alloy, Gold Flash over Ni  
 Contacts: Copper Alloy, 0,38µm Gold-Plated over Ni  
 Shell material: Stainless Steel, Nickel-Plated  
 Insulator material: High temperature LCP thermoplastic rated UL94V-0



#### Ratings:

Voltage: 30VAC (rms)  
 Current: 1.5A (Pin 1 and 5), .25A (other pins)  
 All housing materials rated for "lead-free" soldering up to 260° C

#### Electrical:

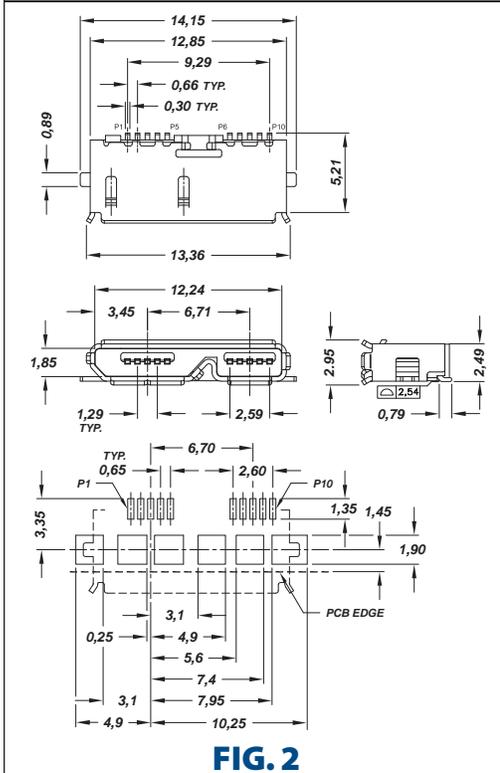
Contact resistance: 30mΩ max. (Pin 1 and 5)  
 50mΩ max. (other pins)  
 Insulation resistance: 100MΩ min.  
 Dielectric withstanding voltage: 100VAC for 1 minute at sea level

#### Mechanical:

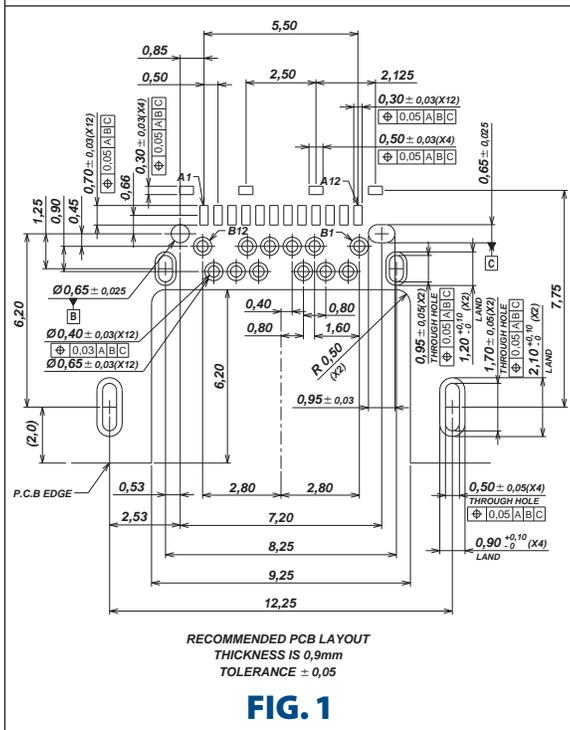
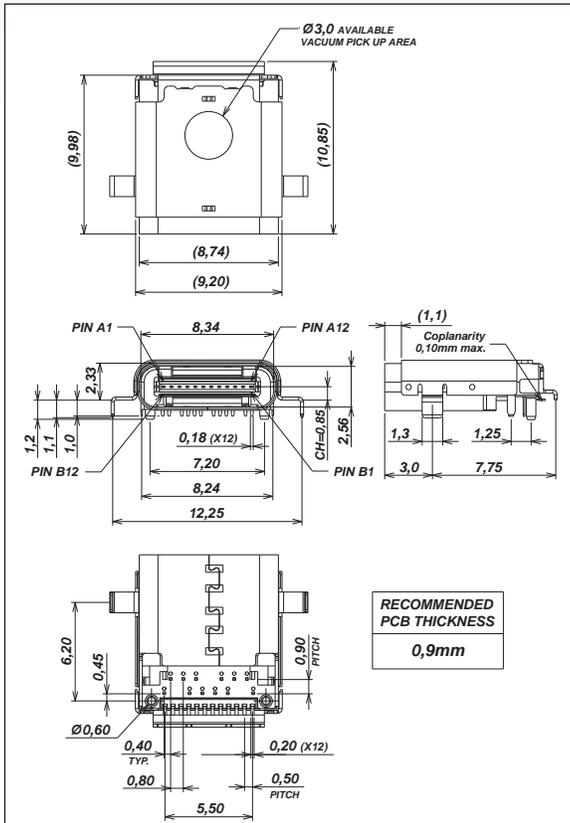
Random vibration: No discontinuity >1µs per EIA 364-28, cond. V, letter A  
 Durability: 10,000 cycles max. per EIA 364-09  
 Mating force: 35 Newtons max. per EIA 364-13  
 Unmating force: Initial - 10 Newtons min. per EIA 364-13  
 After test - 8 Newtons min. per EIA 364-13

#### Environmental:

Operating Temperature Range: -40°C to +85°C  
 Humidity per EIA 364-31, method II, condition A  
 Temperature Life per EIA 364-17, condition 3, method A  
 Solderability per EIA 364-52, category 2 (260°C for 3 seconds)



## SERIES 898 • UNIVERSAL SERIAL BUS 3.1 TYPE C • MID-MOUNT RECEPTACLE



**FIG. 1**

- USB 3.1 Mid-Mount, Hybrid Layout
- Full metal housing with enhanced EMI/RFI prevention
- Reversible USB Type C Connector
- 10Gbps Data rate
- 2X faster than USB 3.0 with more efficient data transfer, higher through-put & improved I/O power efficiency
- For Storage, Smartphone, Tablet, Notebook, Docking, Automotive & Home Entertainment



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Mid-Mount Type C Receptacle, Hybrid Layout</b>
	898-43-024-90-310000
	<b>(Tape &amp; Reel Packaged, 900 parts per 330mm reel)</b>

### Technical Specifications

#### Materials:

Terminals: Copper Alloy, Tin-Plated  
 Contacts: Copper Alloy, 0,76µm Gold-Plated  
 Casing and Shield: Stainless Steel  
 Insulator material: High temperature thermoplastic rated UL94V-0



#### General Specifications:

Temperature Range:  
 Operating: -55°C to +85°C  
 Nominal: +20°C

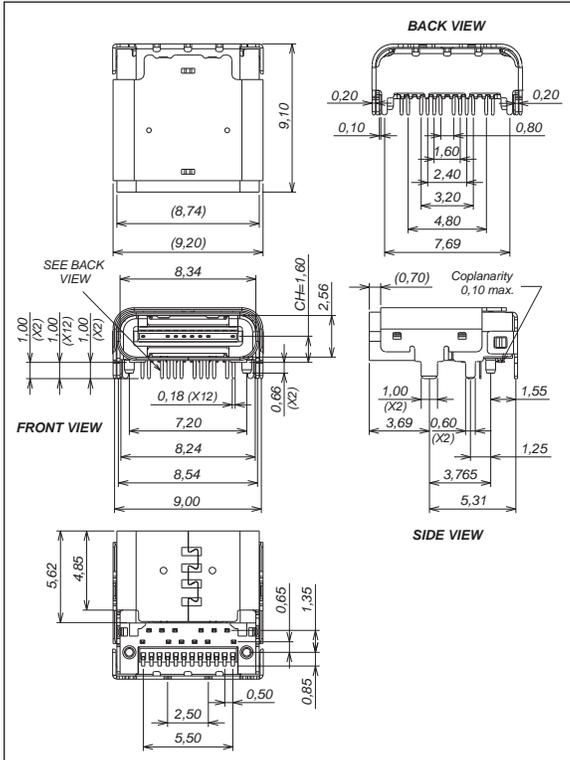
#### Electrical:

Voltage: 50VAC (rms)  
 LLCR: 40mΩ (initial), Δ10mΩ (after)  
 Dielectric Strength: 100VAC  
 Insulation resistance: 100MΩ min.  
 Current Rating: VBUS and GND contacts rated @ 1.25A each, paralleled for a total of 5A

#### Mechanical:

Durability: 10,000 cycles  
 Insertion force: 20 Newtons max.  
 Extraction force: 8 Newtons min., 20 Newtons max.

## SERIES 898 • UNIVERSAL SERIAL BUS 3.1 TYPE C • TOP MOUNT RECEPTACLE



- USB 3.1 Top Mount, Hybrid Layout
- Full metal housing with enhanced EMI/RFI prevention
- Reversible USB Type C Connector
- 10Gbps Data rate
- 2X faster than USB 3.0 with more efficient data transfer, higher through-put & improved I/O power efficiency
- For Storage, Smartphone, Tablet, Notebook, Docking, Automotive & Home Entertainment



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Top Mount Type C Receptacle, Hybrid Layout</b>
	898-73-024-90-310001
<b>(Tape &amp; Reel Packaged, 550 parts per 330mm reel)</b>	

### Technical Specifications

#### Materials:

- Terminals: Copper Alloy, Tin-Plated
- Contacts: Copper Alloy, 0,76µm Gold-Plated
- Casing and Shield: Stainless Steel
- Insulator material: High temperature thermoplastic rated UL94V-0



#### General Specifications:

- Temperature Range:
- Operating: -55°C to +85°C
- Nominal: +20°C

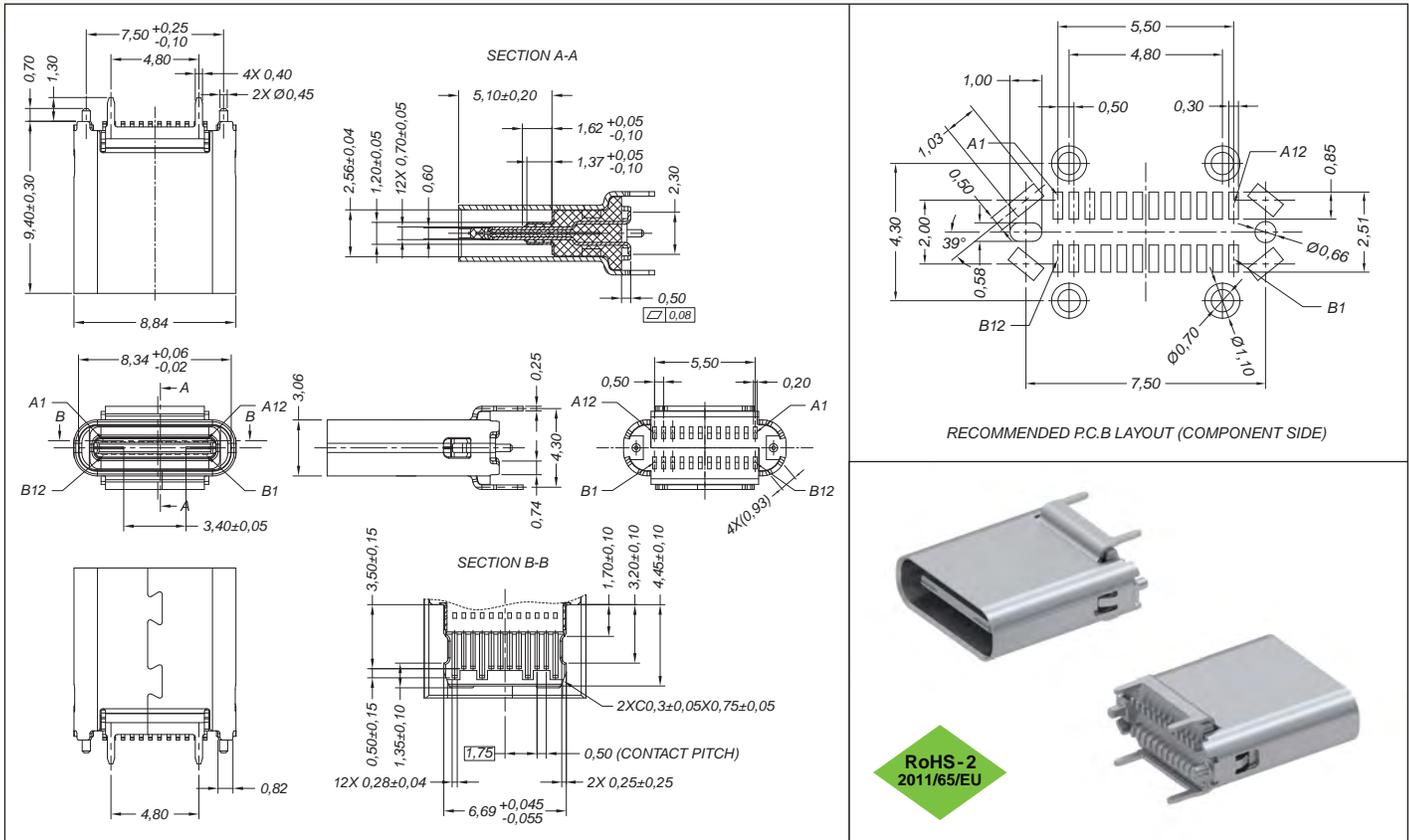
#### Electrical:

- Voltage: 50VAC (rms)
- LLCR: 40mΩ (initial), Δ10mΩ (after)
- Dielectric Strength: 100VAC
- Insulation resistance: 100MΩ min.
- Current Rating: VBUS and GND contacts rated @ 1.25A each, paralleled for a total of 5A

#### Mechanical:

- Durability: 10,000 cycles
- Insertion force: 20 Newtons max.
- Extraction force: 8 Newtons min., 20 Newtons max.

## SERIES 898 • UNIVERSAL SERIAL BUS 3.1 TYPE C • VERTICAL SURFACE MOUNT



### Technical Specifications

#### Materials:

Terminals: Copper Alloy, Tin-Plated  
 Contacts: Copper Alloy, 30 μ" Gold-Plated  
 Casing and Shield: Stainless Steel  
 Insulator material: High temperature thermoplastic rated UL94V-0

#### General Specifications:

Temperature Range:  
 Operating: -40°C to +85°C  
 Nominal: +20°C

#### Electrical:

Voltage: 50VAC (rms)  
 LLCR: 40mΩ max. (initial), Δ10mΩ (Test cond. 20mV, 100mA)  
 Dielectric Strength: 100VAC  
 Insulation resistance: 100MΩ min.  
 Current Rating: 5A for VBUS pin, 1.25A for VCONN pin

#### Mechanical:

Durability: 10,000 cycles  
 Insertion force: 5-20 Newtons  
 Extraction force: 8-20 Newtons after test

### ORDERING INFORMATION

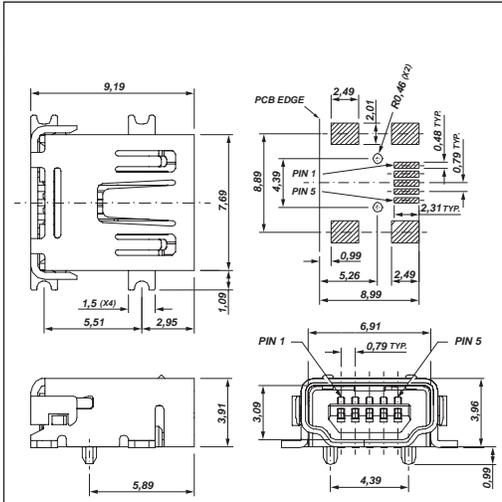
#### Vertical Surface Mount Type C Receptacle

898-43-024-00-310002

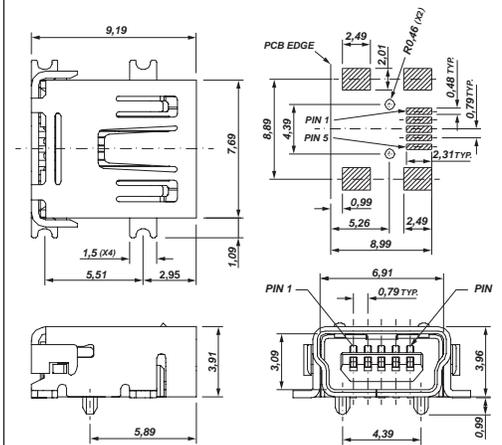
(Packaged in trays: 100 pieces per tray)

- USB 3.1 Vertical Surface mount, Type C
- Full metal housing with enhanced EMI/RFI prevention
- Reversible USB Type C Connector
- 10Gbps Data rate
- 2X faster than USB 3.0 with more efficient data transfer, higher through-put & improved I/O power efficiency
- For Storage, Smartphone, Tablet, Notebook, Docking, Automotive and Home Entertainment

## SERIES 896, 897 • MINI UNIVERSAL SERIAL BUS • SURFACE MOUNT SOCKETS



**FIG. 1**



**FIG. 2**

- Mini USB receptacles for surface mount
- 5 Pin (one ID Pin), 0.8mm pitch, mini USB connector
- Reduced mounting space
- Fully Shielded
- Fully compliant with current USB 2.0 specifications
- Smaller and lighter than standard USB connectors for portable & handheld devices
- Packaged on Tape and Reel:  
896-43-005-00-100001 - 800 pieces per reel  
897-43-005-00-100001 - 700 pieces per reel



### ORDERING INFORMATION

<b>FIG. 1</b>	<b>Mini Type A Receptacle, Single, Surface Mount</b>
	896-43-005-00-100001
<b>FIG. 2</b>	<b>Mini Type B Receptacle, Single, Surface Mount</b>
	897-43-005-00-100001

### Technical Specifications

#### Materials:

Terminals: Copper Alloy, Tin Plated  
 Contacts: Copper Alloy, 0,76µm Gold Plated  
 Casing and Shield: Stainless Steel  
 Insulator material: High temperature thermoplastic rated UL94V-0

#### Ratings:

Voltage: 30VAC (rms)  
 Current: 1A max. per contact for 30°C temperature rise  
 All housing materials rated for "lead-free" soldering up to 260° C

#### Electrical:

Contact resistance: 50mΩ max.  
 Insulation resistance: 100MΩ min.  
 Dielectric withstanding voltage: 100VAC at sea level  
 Capacitance: 2pF max.

#### Mechanical:

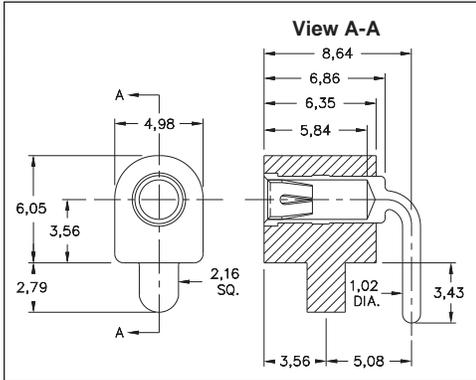
Random vibration: No discontinuity >1µs per EIA 364-28, cond. V, letter A  
 Physical shock: No discontinuity >1µs per EIA 364-27, condition H  
 Durability: 5000 cycles min. per EIA 364-09  
 Mating force: 35 Newtons max. per EIA 364-13  
 Unmating force: Initial - 7 Newtons min. per EIA 364-13  
 After test - 3 Newtons min. per EIA 364-13  
 Cable pull-out force per EIA 364-38

#### Environmental:

Thermal shock per EIA 364-32, condition I  
 Humidity per EIA 364-31, method II, condition A  
 Temperature life per EIA 364-17, condition 3, method A  
 Solderability per EIA 364-52, category 2



## SERIES 395...3XX • RIGHT ANGLE SOCKET • TEST POINT

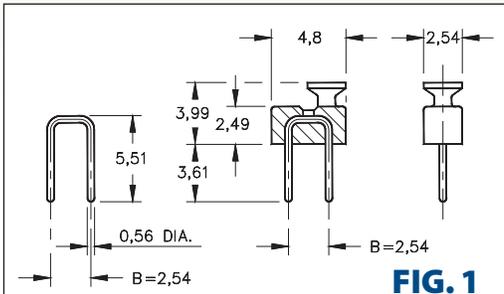


- Available to accept 3 pin sizes: 1, 1.5, & 2mm
- Uses high temperature PCT polyester insulator
- Standard insulator color is black
- For Electrical, Mechanical and Environmental Data, see page 264 for details

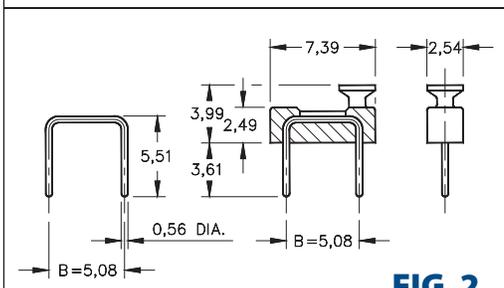


Pin Size	ORDERING INFORMATION						
1.0mm	395-XX-101-34-340000						
1.5mm	395-XX-101-03-380000						
2.0mm	395-XX-101-07-350000						
	<p><b>RECOMMENDED MOUNTING HOLES</b></p> <p style="text-align: center;">XX=Plating Code See Below</p> <div style="text-align: right; border: 1px solid green; padding: 5px; color: white; width: fit-content; margin: 0 auto;"> <b>RoHS-2</b> 2011/65/EU         </div>						
<b>SPECIFY PLATING CODE XX =</b>	13 <span style="color: green;">◆</span>		93				
Sleeve (Pin)	0,25µm Au		5,08µm Sn/Pb				
Contact (Clip)	0,76µm Au		0,76µm Au				

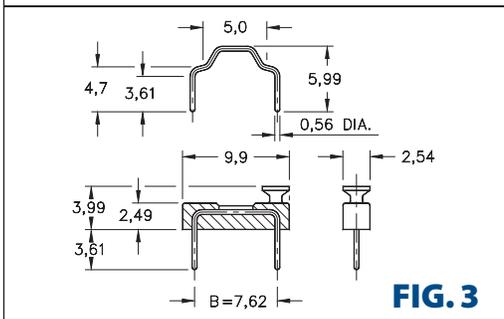
## SERIES 388, 999 • MALE SHORTING JUMPERS & MICROPHONE SOCKETS



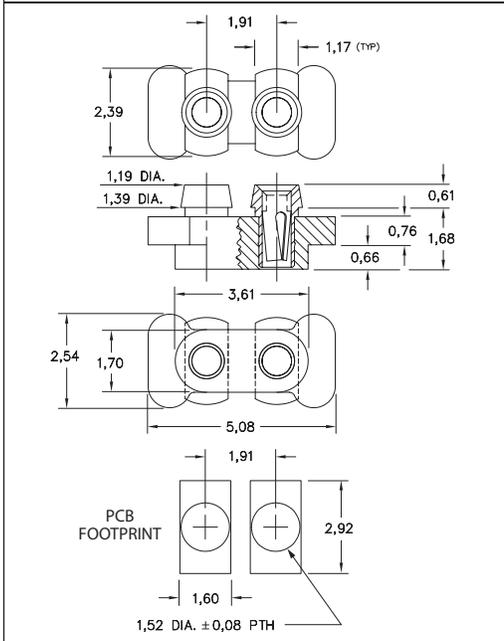
**FIG. 1**



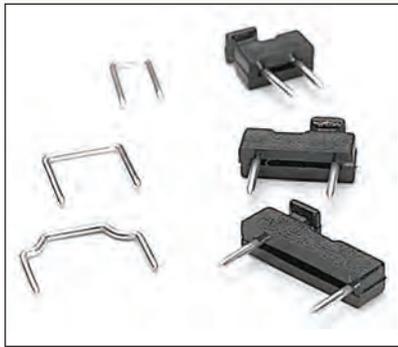
**FIG. 2**



**FIG. 3**



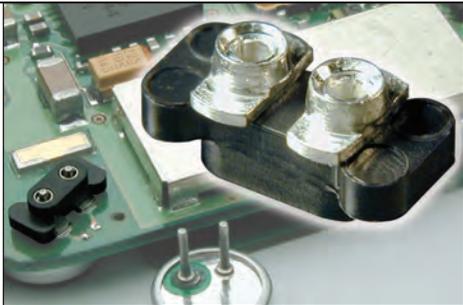
- Male shorting jumpers are available with or without insulator and have 0,56 diameter pins with 2,54, 5,08 or 7,62 center spacing
- Insulator materials are not high temperature
- For Electrical, Mechanical & Environmental Data, see page 264 for details



### ORDERING INFORMATION

Male Shorting Jumper 2,54 Spacing		
<b>FIG. 1</b>	<b>Color / Style</b>	<b>Plating 0,25µm Au</b>
	Black Not Insulated	999-11-210-10-000000 999-11-110-10-000000
Male Shorting Jumper 5,08 Spacing		
<b>FIG. 2</b>	<b>Color / Style</b>	<b>Plating 0,25µm Au</b>
	Black Not Insulated	999-11-220-10-000000 999-11-112-10-000000
Male Shorting Jumper 7,62 Spacing		
<b>FIG. 3</b>	<b>Color / Style</b>	<b>Plating 0,25µm Au</b>
	Black Not Insulated	999-11-230-10-000000 999-11-113-10-000000

- Series 388 microphone socket is a bottom entry socket for microphones having Ø 0,46 pins on 1,91 centers
- Designed to be surface mount and intrusive reflow soldered
- Series 388 uses MM #8874 pins. See page 159 for details
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Insulator is high temperature Nylon 46, rated UL 94 V-0



### Ordering Information Microphone Socket

<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> <b>XX=Plating Code See Below</b> </div>	388-XX-102-11-740800 (Discrete socket)
	↑ Plating Code 388-XX-102-11-740799 (Tape and Reel) (Supplied on 12mm wide carrier tape per EIA-481: 6,500 per 330mm reel)
<b>SPECIFY PLATING CODE XX=</b>	99 44
Sleeve (Pin)	5,08µm Sn/Pb 5,08µm Sn
Contact (Clip)	5,08µm Sn/Pb 5,08µm Sn



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# PIN RECEPTACLES



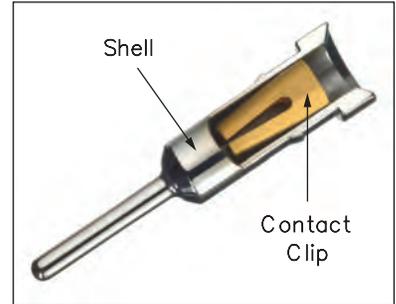


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**The basic component used for making electrical connections in a wide array of electronic equipment is the pin receptacle.** The Mill-Max pin receptacle provides a highly reliable, low resistance electrical path to terminate the pins of a device or discrete wires to a PCB or other mating apparatus such as cables, modules or other pins and wires. Assembled into sockets i.e. DIP, SIP, PGA, etc. or used discretely, receptacles make devices and modules pluggable for repair and replacement. The machined shell or housing of pin receptacles is available in various styles depending on the application, e.g. low profile, elevated, press-fit, SMT. The terminal end of pin receptacles has many variations: a round solder tail, a press-fit tail, a surface mount base, crimp barrel, soldercup, swage feature or no tail.



Inside every Mill-Max receptacle is a contact clip. A contact clip is a conductive, multi-finger, progressive die stamping. The standard material is beryllium copper and for high temperature applications, beryllium nickel is used. Both materials are heat treated to achieve optimal spring characteristics & durability. The contact clip engages, scores and holds the mated pin making an electrical and gas tight connection at 3, 4 or 6 points of contact, depending on the selected contact. Mill-Max receptacles are capable of 1,000 minimum insertion/extraction cycles for a broad range of applications. Mating pin size, shape and finish, along with application specific variables, will affect the life of a contact.



Mill-Max currently offers over 39 styles of contacts to engage pins from 0,20 to 2,59 in diameter. A convenient contact selector chart is located on page 248 showing the different specifications of each contact.



Pin receptacles can be utilized as discrete connectors for the plugging and unplugging of components on PC boards. They can be utilized individually or in random arrays where the usage is small. They can be handled and loaded manually in preparation for soldering or, with a different style shell, for press-fitting. When the requirement is for volume placement of receptacles, socket carriers or tape and reel packaging are tremendous labor-saving solutions for our customers.

In addition to the products found on the following pages, Mill-Max offers the following stock materials and diameters available for manufacture:

**BRASS Alloys 360/385:** 1,57/1,83/1,98/2,36/3,18/3,96/4,75/6,35 diameters

**PHOSPHOR BRONZE Alloy 544:** 1,57/1,83/1,98 diameters

**TELLURIUM COPPER Alloy 145:** 2,01/2,36/3,18/3,96 diameters



Mill-Max will gladly quote application specific products. Please complete the specification sheet on page 247 or send us your own drawings. We assure you a fast response.



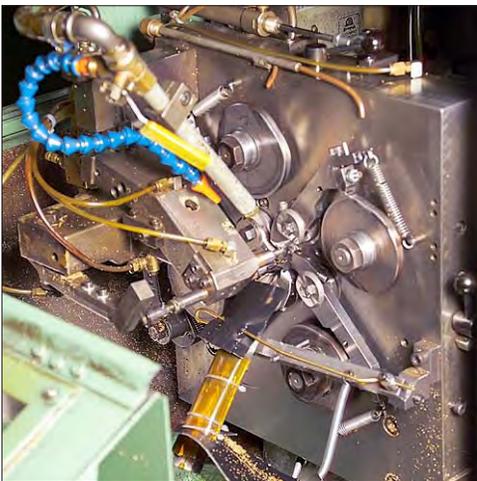
# CUSTOM MACHINING CAPABILITY

## DON'T SEE QUITE WHAT YOU'RE LOOKING FOR IN THE PIN & RECEPTACLE SECTION OF THE CATALOG?

Mill-Max's unique high-speed precision-machining capability enables us to provide custom-designed pins or receptacles tailored to meet your specific requirement.

With over 200 high-speed turning machines on our premises in Oyster Bay, NY, Mill-Max is readily equipped to provide custom pins, terminals and receptacles to your exacting specifications.

Moreover, our in-house, state-of-the-art plating equipment allows us to plate your custom pin with a selection of industry standard finishes. Initial quantities are typically shipped in 5-6 weeks.



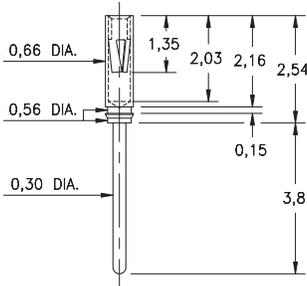
# PIN RECEPTACLES

**FOR 0,20 - 0,33 DIAMETER PINS (#04 CONTACT)  
AND 0,30 - 0,43 DIAMETER PINS (#10 CONTACT)  
(SEE SPECIFIC CONTACT RANGE ON PAGE 250)**

## 8210

**8210-0-15-15-04-27-04-0**

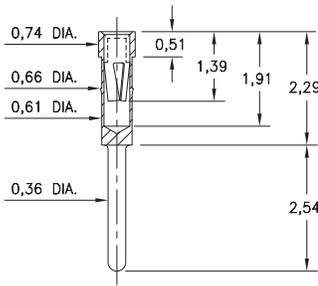
Press-fit in 0,61/0,68 stepped hole



## 0439

**0439-0-15-15-04-27-04-0**

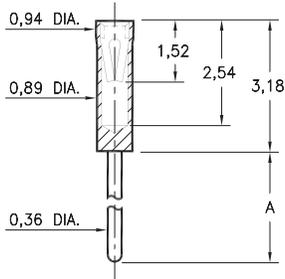
Press-fit in 0,64 mounting hole



## X464

**X464-X-15-XX-10-XX-04-0**

Solder mount in 0,41 min. mounting hole

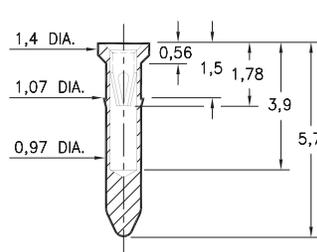


Basic Part Number	Length A
<b>0464-0</b>	3,18
<b>0464-1</b>	6,35
<b>6464-0</b>	6,99

## 9225

**9225-0-15-XX-10-XX-10-0**

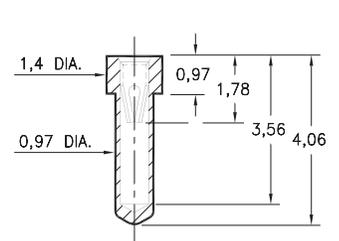
Press-fit in 1,0 mounting hole



## 0529

**0529-0-15-XX-10-XX-10-0**

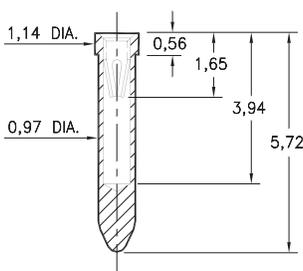
Solder mount in 1,02 min. mounting hole



## 8947

**8947-0-15-XX-10-XX-10-0**

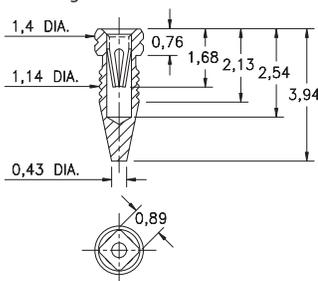
Solder mount in 1,02 min. mounting hole



## 4993

**4993-0-15-15-10-27-10-0**

Compliant press-fit in 1,04 - 1,12 Dia. mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#04 or #10 CONTACT (DATA ON PAGE 250)  
(CONTACTS #04 & #10 NOT INTERCHANGEABLE)**



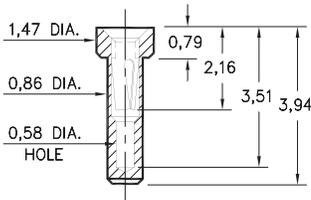
# PIN RECEPTACLES

**FOR 0,38 - 0,51 DIAMETER PINS (#1 CONTACT)  
AND 0,38 - 0,56 DIAMETER PINS (#2 CONTACT)  
(SEE SPECIFIC CONTACT RANGE ON PAGE 251)**

## 0548

**0548-0-15-XX-21-XX-10-0**

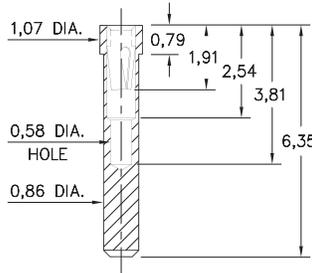
Solder mount in 0,91 min. mounting hole



## 8975

**8975-0-15-XX-21-XX-10-0**

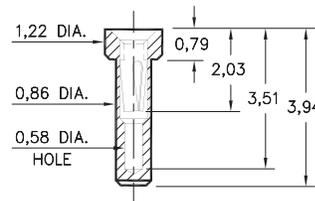
Solder mount in 0,91 min. mounting hole



## 3016

**3016-0-15-XX-21-XX-10-0**

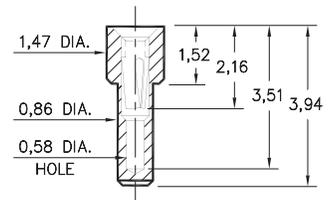
Solder mount in 0,91 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,900 parts per 330mm reel  
See page 194.2 for Tape & Reel details



## 9548

**9548-0-15-XX-21-XX-10-0**

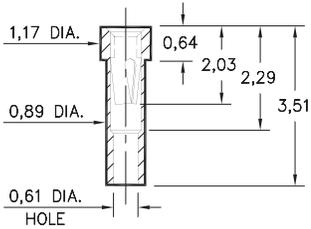
Solder mount in 0,91 min. mounting hole



## 8637

**8637-0-15-XX-21-XX-10-0**

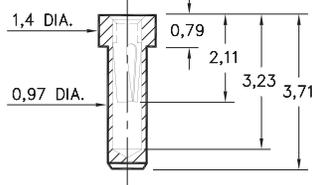
Solder mount in 0,94 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
See page 194.2 for Tape & Reel details



## 1407

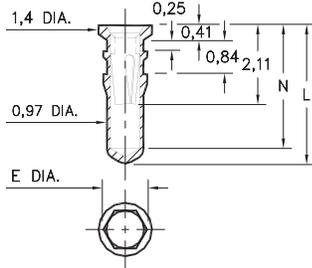
**1407-0-15-XX-11-XX-10-0**

Solder mount in 1,02 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel  
See page 194.1 for Tape & Reel details



## 0553/4553/8553

**X553-X-15-XX-X1-XX-10-0**  
Also available on 16mm wide carrier tape:  
1,580 parts per 330mm reel  
See page 194.1 for Tape & Reel details



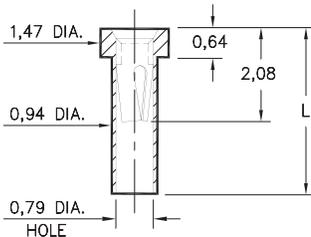
Hex press-fit in 1,04 plated through-hole  
for Part Numbers **0553-X** and **8553-0** ONLY  
Hex press-fit in 1,07 plated through-hole  
for Part Number **4553-0** ONLY

Basic Part Number	Hex Dia. E	Length L	Depth N
<b>0553-1</b>	1,12	3,56	3,15
<b>0553-2</b>	1,12	4,32	3,91
<b>0553-3</b>	1,12	7,16	6,76
<b>4553-0</b>	1,14	4,32	3,91
<b>8553-0</b>	1,12	6,22	5,82

## 0566

**0566-X-15-XX-21-XX-10-0**

Solder mount in 1,0 min. mounting hole

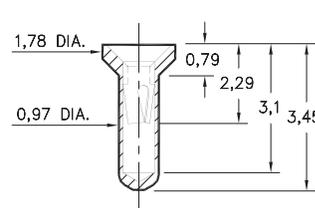


Basic Part Number	Length L
<b>0566-1</b>	2,11
<b>0566-2</b>	3,51

## 0442

**0442-0-15-XX-11-XX-10-0**

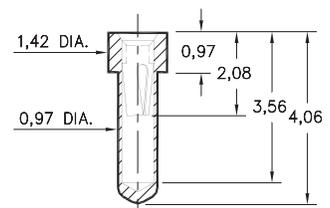
Solder mount in 1,02 min. mounting hole



## 0554

**0554-0-15-XX-21-XX-10-0**

Solder mount in 1,02 min. mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - 10 - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

◆ **01** 5,08µm TIN/LEAD OVER NICKEL

◆ **80** 5,08µm TIN OVER NICKEL (RoHS)

◆ **15** 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

◆ **02** 2,54µm TIN/LEAD OVER NICKEL

◆ **84** 2,54µm TIN OVER NICKEL (RoHS)

◆ **27** 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#11 or #21 CONTACT (DATA ON PAGE 251)**

(For alternate contact choices, see group A on page 248)



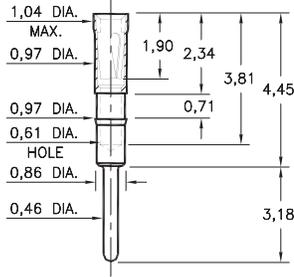
# PIN RECEPTACLES

**FOR 0,38 - 0,46 DIAMETER PINS (#09 CONTACT)  
FOR 0,38 - 0,51 DIAMETER PINS (#11 CONTACT)  
AND 0,38 - 0,56 DIAMETER PINS (#21 CONTACT)**

## 0467

**0467-0-15-XX-21-XX-04-0**

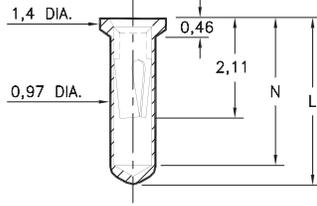
Press-fit in 0,94 mounting hole



## 0552

**0552-X-15-XX-X1-XX-10-0**

Solder mount in 1,02 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel  
See page 194.2 for Tape & Reel details

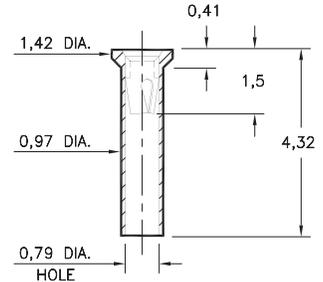


Basic Part Number	Length L	Depth N
0552-1	3,45	3,05
0552-2	4,32	3,81

## 5522

**5522-0-15-XX-XX-XX-10-0**

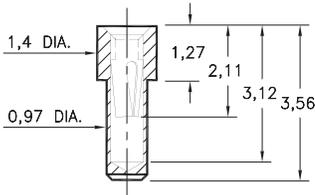
Solder mount in 1,02 min. mounting hole



## 0569

**0569-0-15-XX-X1-XX-10-0**

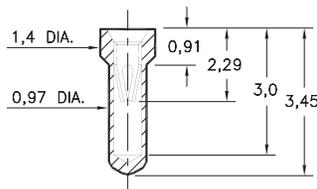
Solder mount in 1,02 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
See page 194.2 for Tape & Reel details



## 6023

**6023-0-15-XX-21-XX-10-0**

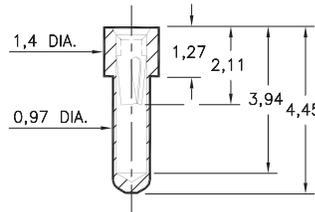
Solder mount in 1,02 min. mounting hole



## 6214

**6214-0-15-XX-21-XX-10-0**

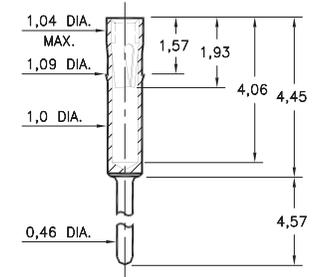
Solder mount in 1,02 min. mounting hole



## 2086

**2086-0-15-XX-21-XX-04-0**

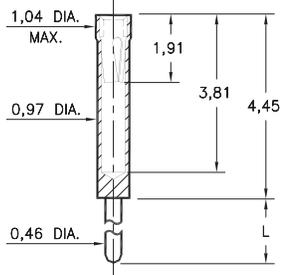
Press-fit in 1,02 mounting hole



## 0461

**0461-X-15-XX-X1-XX-04-0**

Solder mount in 0,51 min. mounting hole

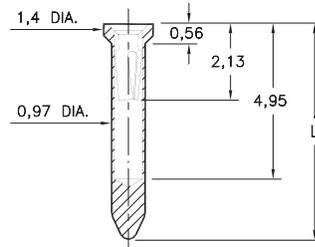


Basic Part Number	Length L
0461-0	10,16
0461-1	6,99
0461-2	4,57
0461-3	3,18
0461-4	1,52
0461-5	11,18

## 8579

**8579-X-15-XX-X1-XX-10-0**

Solder mount in 1,02 min. mounting hole  
Also available on 24mm wide carrier tape  
See chart for details  
See page 194.2 for Tape & Reel details



Basic Part Number	Length L
8579-0	5,94
8579-1	7,49

### T&R Packaging

Basic Part Number	Tape Width	Parts per 330mm Reel
8579-0	24mm	1,200
8579-1	24mm	1,000

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 84 2,54 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#09, #11 or #21 CONTACT (DATA ON PAGES 250 & 251)**  
(For alternate contact choices, see group A on page 248)



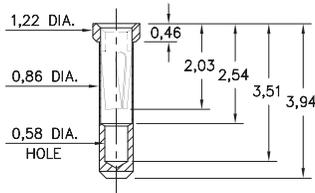
# PIN RECEPTACLES

**FOR 0,38 - 0,51 DIAMETER PINS (#11 CONTACT)  
AND 0,38 - 0,56 DIAMETER PINS (#21 CONTACT)  
(SEE SPECIFIC CONTACT RANGE ON PAGE 251)**

## 4716

**4716-0-15-XX-21-XX-10-0**

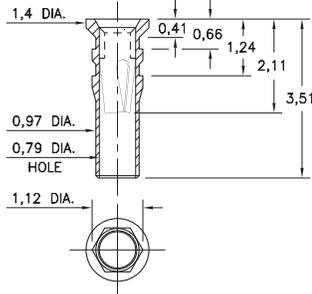
Solder mount in 0,97 min. mounting hole



## 6553

**6553-0-15-XX-11-XX-10-0**

Hex press-fit in 1,04 plated through-hole



**SPECIFICATIONS:**

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions: Millimeters**

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - 0 - 15 - XX - X1 - XX - 10 - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 84 2,54 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#11 or #21 CONTACT (DATA ON PAGE 251)**

(For alternate contact choices, see group A on page 248)

# PIN RECEPTACLES

**FOR 0,38 - 0,51 DIAMETER PINS (#1 CONTACT)  
AND 0,38 - 0,56 DIAMETER PINS (#2 CONTACT)  
(SEE SPECIFIC CONTACT RANGE ON PAGE 251)**

<p><b>8467</b> 8467-0-15-XX-21-XX-04-0 Hex press-fit in 0,91 plated through-hole</p>	<p><b>6192</b> 6192-0-15-XX-21-XX-04-0 Square press-fit in 0,81 plated through-hole</p>	<p><b>9553</b> 9553-0-15-XX-X1-XX-04-0 Hex press-fit in 1,04 plated through-hole</p>	<p><b>5531</b> 5531-0-15-XX-21-XX-10-0 Hex press-fit in 1,04 plated through-hole</p>
<p><b>7553</b> 7553-0-15-XX-11-XX-10-0 Hex press-fit in 1,04 plated through-hole</p>	<p><b>9407</b> 9407-0-15-XX-11-XX-10-0 Solder mount in 1,02 min. mounting hole</p>	<p><b>9462</b> 9462-0-15-XX-21-XX-04-0 Hex press-fit in 1,09 plated through-hole</p>	<p><b>1147</b> 1147-0-18-XX-21-XX-10-0 Press-fit in 1,09 min. mounting hole Accepts wire sizes up to 0,36 dia.</p>
<p><b>3061</b> 3061-0-19-XX-21-XX-10-0 Wire Crimp Termination. Accepts wire sizes 28 AWG Max. / 32 AWG Min.</p>	<p><b>0579</b> 0579-0-15-XX-X1-XX-10-0 Press-fit in 1,02 mounting hole</p>	<p><b>8874</b> 8874-0-15-XX-11-XX-10-0 Bottom entry surface mount See page 152 for application details</p>	<p><b>0613</b> 0613-0-15-XX-21-XX-10-0 Press-fit in 1,19 mounting hole</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - 1X - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

02 2,54µm TIN/LEAD OVER NICKEL

◆ 84 2,54µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#11 or #21 CONTACT (DATA ON PAGE 251)**

(For alternate contact choices, see group A on page 248)



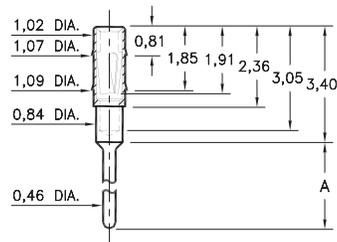
# PIN RECEPTACLES

**FOR 0,38 - 0,51 DIAMETER PINS (#11 CONTACT)  
AND 0,38 - 0,56 DIAMETER PINS (#05 & #21 CONTACTS)  
(SEE SPECIFIC CONTACT RANGE ON PAGE 251)**

## 0489

**0489-X-15-XX-11-XX-04-0**

Press-fit in 1,04 mounting hole



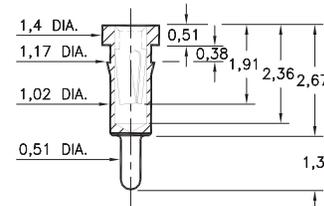
Basic Part Number	Length A
<b>0489-0</b>	2,59
<b>0489-1</b>	5,05
<b>0489-2</b>	7,59

## 0463

**0463-0-15-XX-21-XX-04-0**

Press-fit in 1,09 mounting hole.

Shell is Phosphor Bronze Alloy 544 (B2)

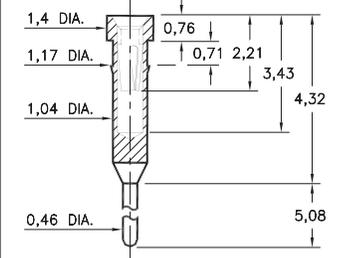


## 0466

**0466-0-15-XX-21-XX-04-0**

Press-fit in 1,09 mounting hole.

Shell is Phosphor Bronze Alloy 544 (B2)

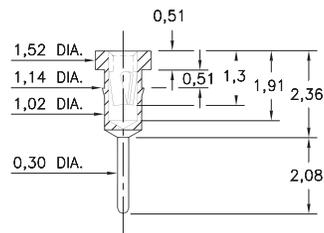


## 7491

**7491-0-15-XX-09-XX-04-0**

Press-fit in 1,07 mounting hole

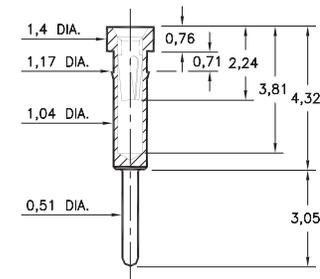
\*Contact substitution not recommended



## 0462

**0462-0-15-XX-X1-XX-04-0**

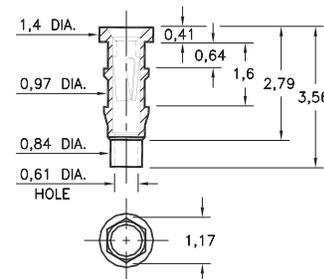
Press-fit in 1,09 mounting hole



## 0560

**0560-0-15-XX-11-XX-10-0**

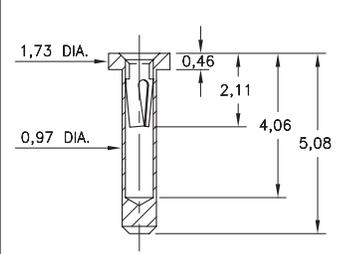
Hex press-fit in 1,09 plated through-hole



## 5552

**5552-0-15-XX-05-XX-10-0**

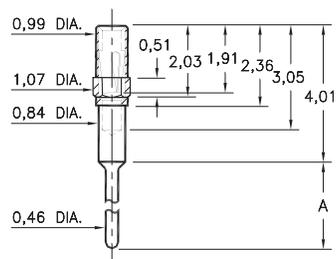
Solder mount in 1,02 min. mounting hole



## 4890

**4890-X-15-XX-11-XX-04-0**

Octagonal press-fit in 1,04 mounting hole

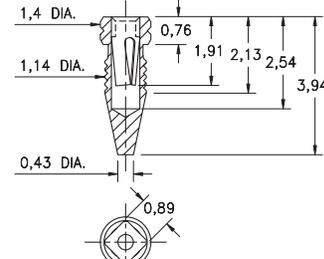


Basic Part Number	Length A
<b>4890-0</b>	2,59
<b>4890-1</b>	5,05
<b>4890-2</b>	7,59

## 4994

**4994-0-15-15-11-27-10-0**

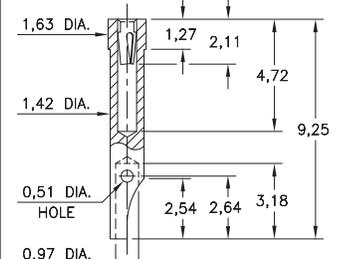
Compliant press-fit in 1,04 - 1,12 dia. mounting hole



## 4485

**4485-0-51-XX-21-XX-10-0**

Solder mount in 1,5 min. mounting hole  
For wire sizes up to 22 AWG



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#05, #11 or #21 CONTACT (DATA ON PAGE 251)**  
(For alternate contact choices, see group A on page 248)



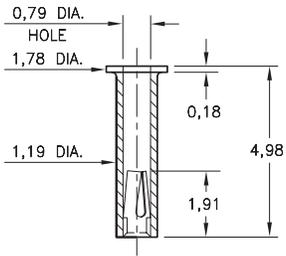
# PIN RECEPTACLES

FOR 0,38 - 0,56 DIAMETER PINS

## 6561

6561-0-15-XX-05-XX-10-0

Solder mount in 1,3 min. mounting hole



<p>6561 6561-0-15-XX-05-XX-10-0 Solder mount in 1,3 min. mounting hole</p>			

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - 05 - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

**01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ **80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ **15** 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

**02** 2,54 $\mu$ m TIN/LEAD OVER NICKEL

◆ **84** 2,54 $\mu$ m TIN OVER NICKEL (RoHS)

◆ **27** 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#05** CONTACT (DATA ON PAGE 251)

(For alternate contact choices, see group A on page 248)

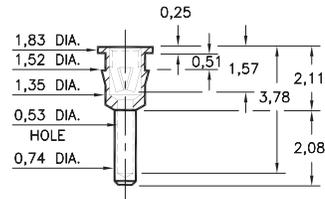
# PIN RECEPTACLES

FOR 0,38 - 0,56 DIAMETER PINS

## 0512

0512-0-15-XX-12-XX-04-0

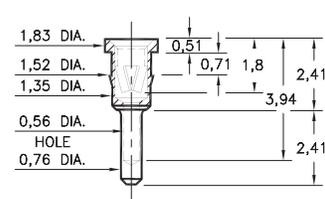
Press-fit in 1,45 mounting hole



## 0703

0703-0-15-XX-12-XX-04-0

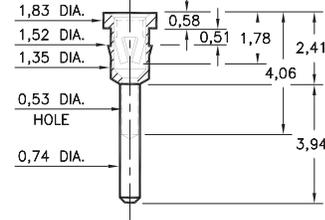
Press-fit in 1,45 mounting hole



## 0574

0574-0-15-XX-12-XX-04-0

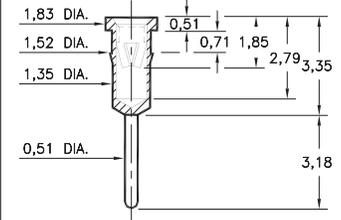
Press-fit in 1,45 mounting hole



## 0468 \*

0468-0-15-XX-12-XX-04-0

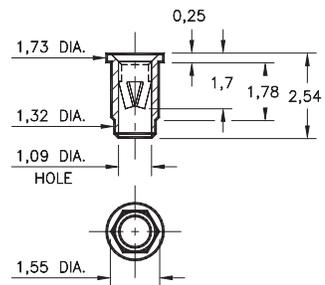
Press-fit in 1,45 mounting hole



## 8894 \*

8894-0-15-XX-12-XX-10-0

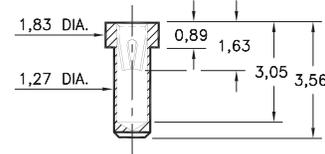
Hex press-fit in 1,5 plated through-hole



## 0550 \*

0550-0-15-XX-22-XX-10-0

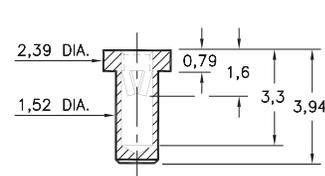
Solder mount in 1,32 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
See page 194.2 for Tape & Reel details



## 0671 \*

0671-0-15-XX-12-XX-10-0

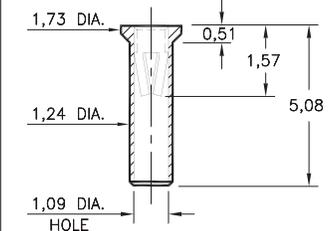
Solder mount in 1,6 min. mounting hole



## 0707 \*

0707-0-15-XX-12-XX-10-0

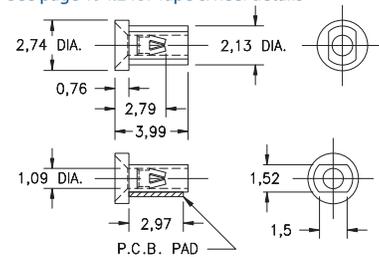
Solder mount in 1,3 min. mounting hole



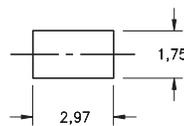
## 5739 \*

5739-0-18-XX-12-XX-10-0

Surface mount  
Also available on 16mm wide carrier tape:  
3,000 parts per 330mm reel  
See page 194.2 for Tape & Reel details



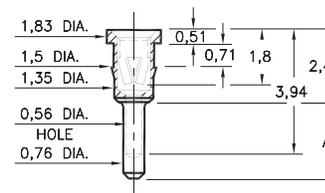
P.C.B. Layout



## 1534

1534-X-15-XX-12-XX-04-0

Press-fit in 1,42 mounting hole



Basic Part Number	Length A
1534-0	2,41
1534-1	3,18

### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

02 2,54µm TIN/LEAD OVER NICKEL

◆ 84 2,54µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#12 or #22 CONTACT (DATA ON PAGE 252)

\* (Contact may be interchanged with group B or C contact on page 248)



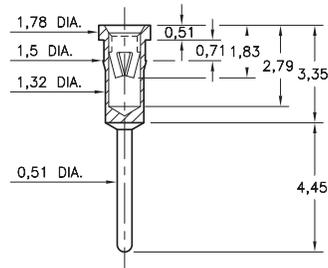
# PIN RECEPTACLES

FOR 0,38 - 0,56 DIAMETER PINS

## 9900

9900-0-15-XX-22-XX-04-0

Press-fit in 1,42 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - 22 - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

01 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

02 2,54 $\mu$ m TIN/LEAD OVER NICKEL

◆ 84 2,54 $\mu$ m TIN OVER NICKEL (RoHS)

◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

#22 CONTACT (DATA ON PAGE 252)

(For alternate contact choices, see group B on page 248)

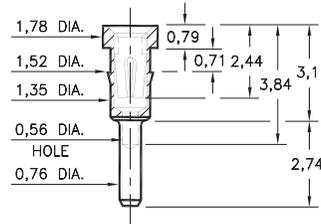
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 0501

0501-0-15-XX-30-XX-04-0

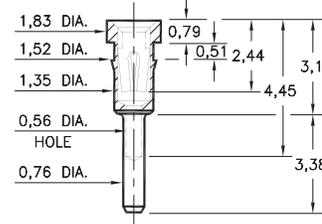
Press-fit in 1,45 mounting hole



## 8427

8427-0-15-XX-30-XX-04-0

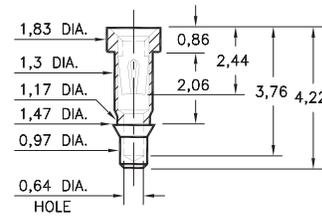
Press-fit in 1,45 mounting hole



## 1434

1434-0-15-XX-30-XX-10-0

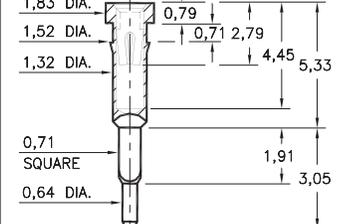
Press-fit in 1,4 mounting hole



## 9970

9970-0-15-XX-30-XX-04-0

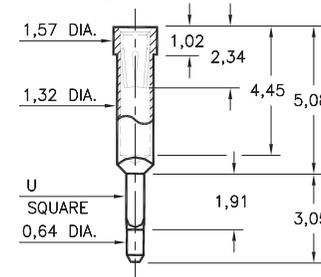
Square press-fit in 0,81 ± 0,05 plated through-hole



## 5970

5970-X-15-XX-32-XX-04-0

Square press-fit for 0,81 or 1,0 ± 0,05 plated through-hole

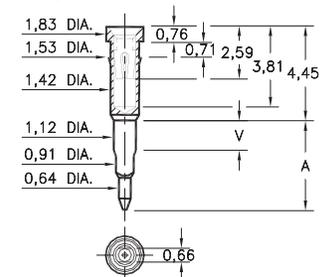


Basic Part Number	U Square	Mounting Hole
5970-1	0,71	0,81
5970-2	0,86	1,0

## 0477/0478

047X-0-18-XX-30-XX-04-0

Solderless press-fit in 0,97 +0,08 / -0,05 plated through-hole (use 1.1mm drill prior to plating)

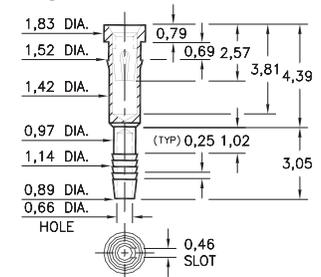


Basic Part Number	Board Thickness	Length V	Length A
0477-0	1,57	1,91	4,45
0478-0	3,18	3,56	6,35

## 4612

4612-0-31-XX-30-XX-04-0

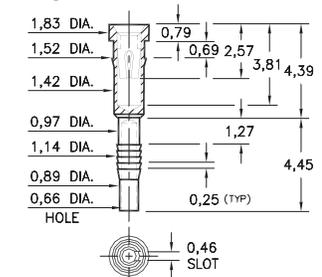
Compliant press-fit in 1,02 ± 0,08 plated through-hole. For 1,52 → 2,54 thick board



## 4613

4613-0-31-XX-30-XX-04-0

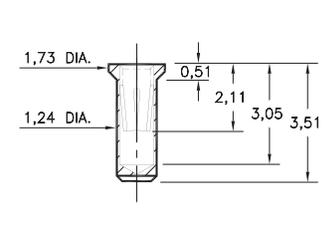
Compliant press-fit in 1,02 ± 0,08 plated through-hole. For 2,29 → 3,30 thick board



## 0680

0680-0-15-XX-32-XX-10-0

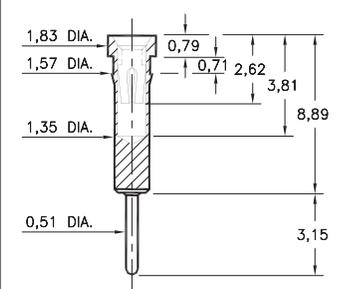
Solder mount in 1,3 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
See page 194.4 for Tape & Reel details



## 0149

0149-0-15-XX-30-XX-04-0

Press-fit in 1,5 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: **XXXX - X - XX - XX - XX - XX - XX - 0**

BASIC PART #

SPECIFY SHELL FINISH:

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

02 2,54µm TIN/LEAD OVER NICKEL

◆ 84 2,54µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#30 or #32 CONTACT (DATA ON PAGE 253)

(For alternate contact choices, see groups B and C on page 248)



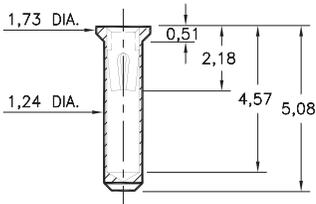
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 0660

0660-0-15-XX-30-XX-10-0

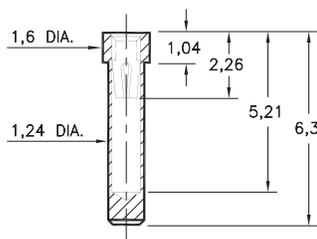
Solder mount in 1,3 min. mounting hole



## 0677

0677-0-15-XX-30-XX-10-0

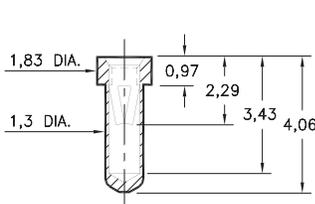
Solder mount in 1,3 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,200 parts per 330mm reel  
Order as: 0677-0-57-XX-30-XX-10-0



## 0555

0555-0-15-XX-32-XX-10-0

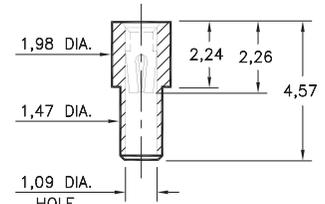
Solder mount in 1,35 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,800 parts per 330mm reel  
See page 194.4 for Tape & Reel details



## 0558

0558-0-15-XX-30-XX-10-0

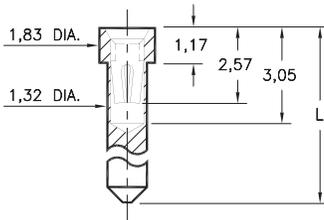
Solder mount in 1,55 min. mounting hole



## 0675/0679

067X-0-15-XX-30-XX-10-0

Solder mount in 1,37 min. mounting hole

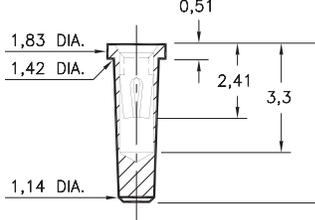


Basic Part Number	Length L
0675-0	3,68
0679-0	5,16

## 1065/1066/7065

X06X-0-15-XX-30-XX-10-0

Solder mount in 1,4 min. mounting hole

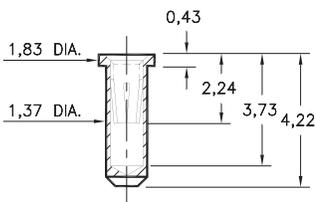


Basic Part Number	Length L
1065-0	4,83
1066-0	4,06
7065-0	4,6

## 0682

0682-0-15-XX-32-XX-10-0

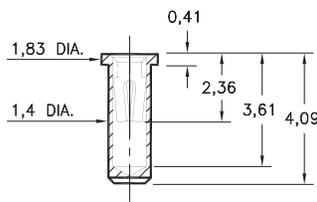
Solder mount in 1,42 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel  
See page 194.4 for Tape & Reel details



## 0667

0667-0-15-XX-30-XX-10-0

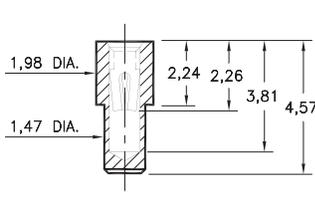
Solder mount in 1,45 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
See page 194.3 for Tape & Reel details



## 0665

0665-0-15-XX-30-XX-10-0

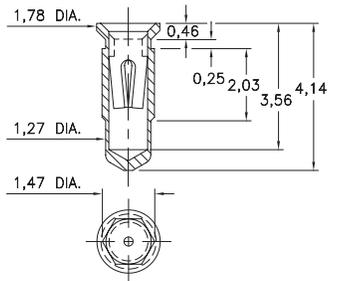
Solder mount in 1,55 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,580 parts per 330mm reel  
See page 194.3 for Tape & Reel details



## 4286

4286-0-15-XX-30-XX-10-0

Hex press-fit in 1,4 plated through-hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: **XXXX - X - XX - XX - XX - 10 - 0**

BASIC PART #

SPECIFY SHELL FINISH:

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

02 2,54µm TIN/LEAD OVER NICKEL

◆ 84 2,54µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#30 or #32 CONTACT (DATA ON PAGE 253)

(For alternate contact choices, see groups B and C on page 248)

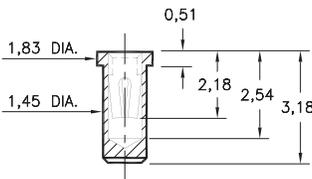


# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

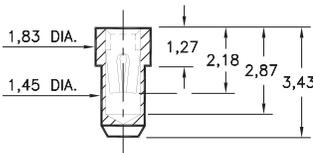
## 0669

**0669-0-15-XX-30-XX-10-0**  
Solder mount in 1,52 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
See page 194.3 for Tape & Reel details



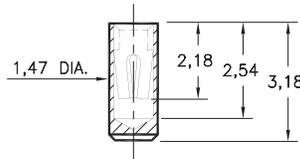
## 0670

**0670-0-15-XX-30-XX-10-0**  
Solder mount in 1,52 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
See page 194.3 for Tape & Reel details



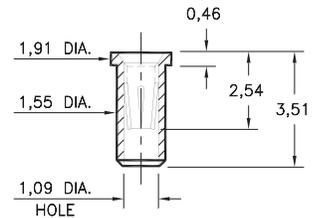
## 0673

**0673-0-15-XX-30-XX-10-0**  
Surface mount



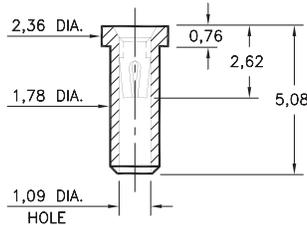
## 0666

**0666-0-15-XX-32-XX-10-0**  
Solder mount in 1,63 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
See page 194.4 for Tape & Reel details



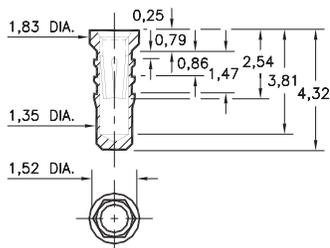
## 0341

**0341-0-15-XX-30-XX-10-0**  
Solder mount in 1,85 mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
See page 194.3 for Tape & Reel details



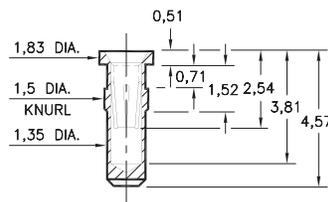
## 0252

**0252-0-15-XX-32-XX-10-0**  
Hex press-fit in 1,45 plated through-hole



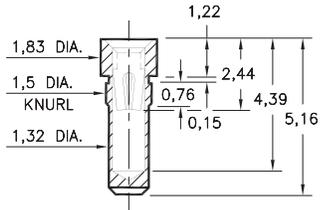
## 0678

**0678-0-15-XX-32-XX-10-0**  
Press-fit in 1,45 mounting hole



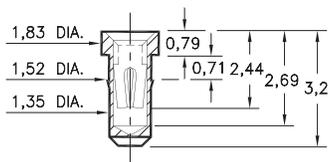
## 0676

**0676-0-15-XX-30-XX-10-0**  
Press-fit in 1,45 mounting hole



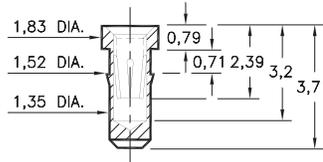
## 0697

**0697-0-15-XX-30-XX-10-0**  
Press-fit in 1,45 mounting hole



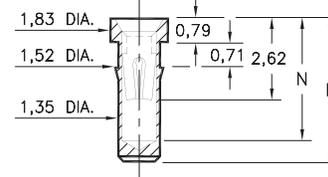
## 0668

**0668-0-15-XX-30-XX-10-0**  
Press-fit in 1,45 mounting hole



## 0253/1033

**XXX3-0-15-XX-30-XX-10-0**  
Press-fit in 1,45 mounting hole



Basic Part Number	Length L	Depth N
<b>0253-0</b>	4,39	3,76
<b>1033-0</b>	5,16	4,11

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30 or #32 CONTACT (DATA ON PAGE 253)**

(For alternate contact choices, see groups B and C on page 248)



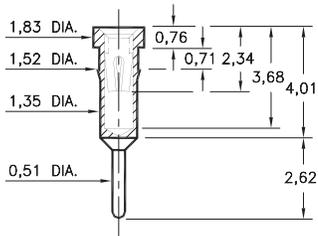
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 4011

4011-0-15-XX-30-XX-04-0

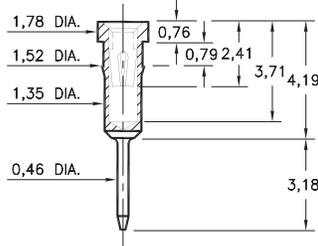
Press-fit in 1,45 mounting hole



## 1801

1801-0-15-XX-30-XX-04-0

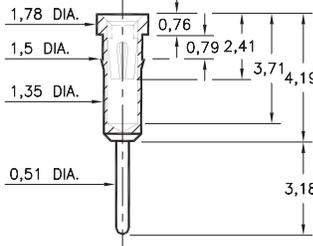
Press-fit in 1,45 mounting hole.  
Shell is Phosphor Bronze Alloy 544 (B2)



## 1001

1001-0-15-XX-3X-XX-04-0

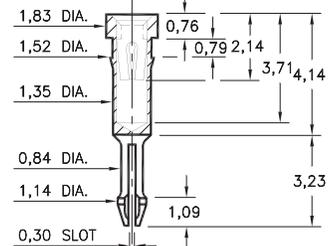
Press-fit in 1,45 mounting hole



## 0156

0156-0-18-XX-30-XX-04-0

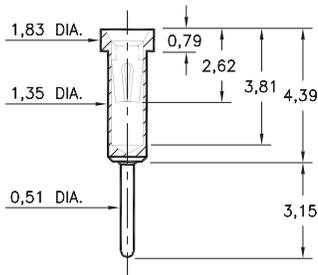
Self-retention socket pin 0,97 - 1,09 hole prior to soldering



## 0255

0255-0-15-XX-30-XX-04-0

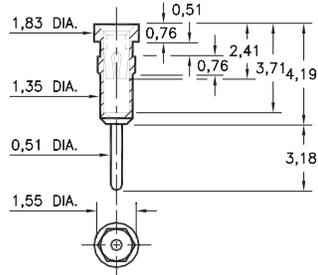
Solder mount in 0,56 min. mounting hole



## 1109

1109-0-15-XX-30-XX-04-0

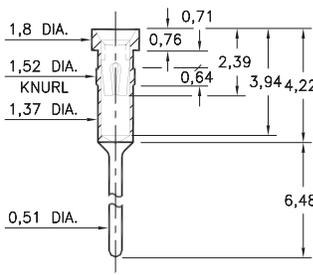
Hex press-fit in 1,45 plated through-hole



## 3013

3013-0-15-XX-32-XX-04-0

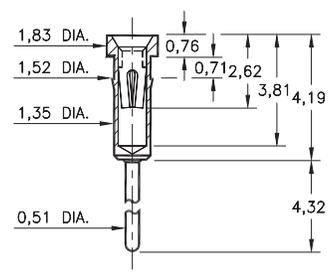
Press-fit in 1,45 mounting hole



## 0134

0134-0-15-XX-3X-XX-04-0

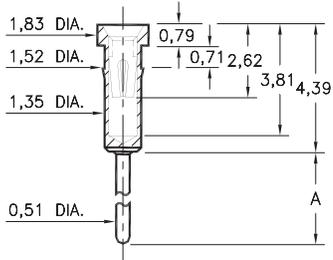
Press-fit in 1,45 mounting hole



## 0132/0135

013X-0-15-XX-30-XX-04-0

Press-fit in 1,45 mounting hole

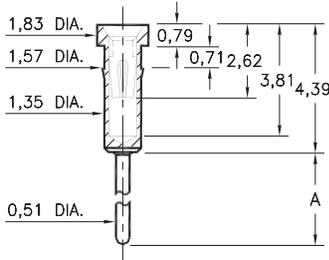


Basic Part Number	Length A
0132-0	6,93
0135-0	4,65

## 0133/0147

01XX-0-15-XX-30-XX-04-0

Press-fit in 1,5 mounting hole



Basic Part Number	Length A
0133-0	9,7
0147-0	14,3

### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 15 - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#30 or #32 CONTACT (DATA ON PAGE 253)

(For alternate contact choices, see groups B and C on page 248)



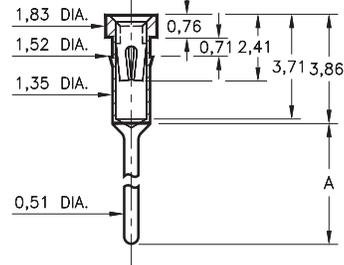
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 1005/1013/8898

XXXX-0-15-XX-3X-XX-04-0

Press-fit in 1,45 mounting hole  
Annealed brass shell for auto-clinching \*



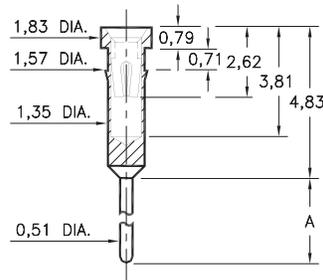
Basic Part Number	Length A
1005-0	3,51
1013-0	4,19
8898-0	5,69

\* NOTE: 8898 is not annealed & not suitable for auto-clinching

## 0145/0146

014X-0-15-XX-30-XX-04-0

Press-fit in 1,5 mounting hole

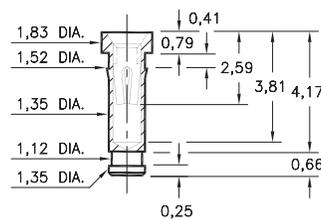


Basic Part Number	Length A
0145-0	7,62
0146-0	10,41

## 4378

4378-0-15-XX-30-XX-10-0

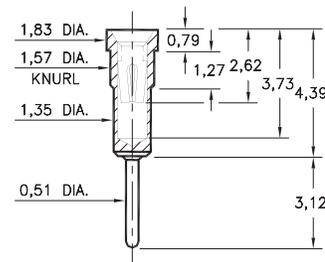
Press-fit in 1,45 mounting hole



## 0556

0556-0-15-XX-30-XX-04-0

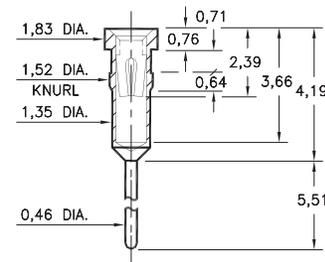
Press-fit in 1,5 mounting hole



## 1103

1103-0-15-XX-30-XX-04-0

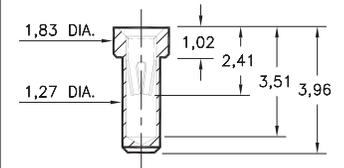
Press-fit in 1,45 mounting hole



## 9234

9234-0-15-XX-30-XX-10-0

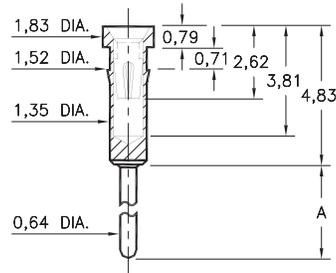
Solder mount in 1,32 min. mounting hole



## 0136/37/38/39/41/48/52

01XX-0-15-XX-30-XX-04-0

Press-fit in 1,45 mounting hole

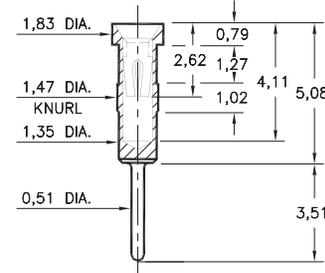


Basic Part Number	Length A
0136-0	30,86
0137-0	14,22
0138-0	5,33
0139-0	16,13
0141-0	17,78
0148-0	11,56
0152-0	10,41

## 0447

0447-0-15-XX-30-XX-04-0

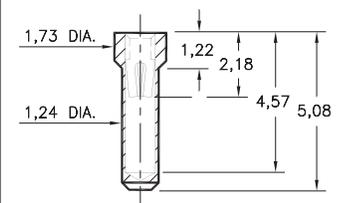
Press-fit in 1,42 mounting hole



## 5660

5660-0-15-XX-30-XX-10-0

Solder mount in 1,3 min. mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - 15 - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30 or #32 CONTACT (DATA ON PAGE 253)**

(For alternate contact choices, see groups B and C on page 248)



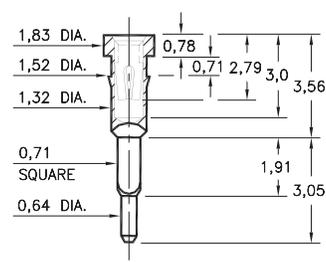
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 7132

7132-0-15-XX-30-XX-04-0

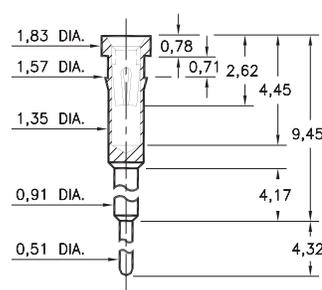
Square press-fit for 0,81 ± 0,05 plated through-hole



## 1038

1038-0-15-XX-30-XX-04-0

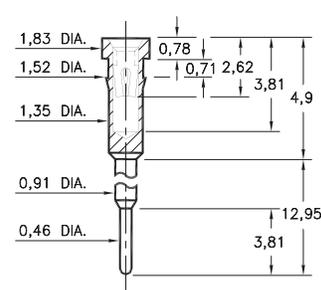
Press-fit in 1,5 mounting hole



## 1261

1261-0-15-XX-30-XX-04-0

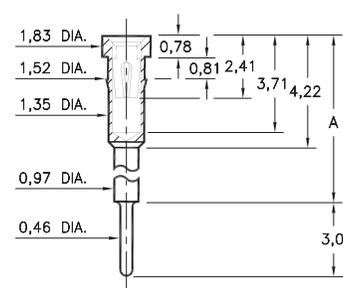
Press-fit in 1,45 mounting hole



## 0153

0153-X-15-XX-30-XX-04-0

Press-fit in 1,45 mounting hole

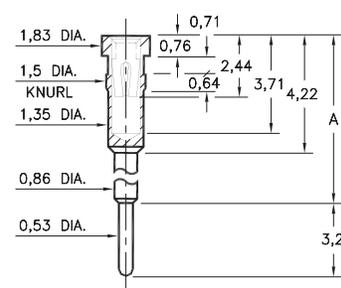


Basic Part Number	Height A
0153-1	5,99
0153-2	8,0
0153-3	10,21
0153-4	11,99
0153-5	15,09
0153-6	17,75

## 1602/1610

16XX-0-15-XX-30-XX-04-0

Press-fit in 1,45 mounting hole

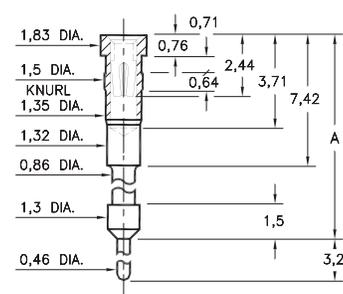


Basic Part Number	Height A
1602-0	11,2
1610-0	16,31

## 0903/0904

090X-0-15-XX-30-XX-04-0

Press-fit in 1,45 mounting hole

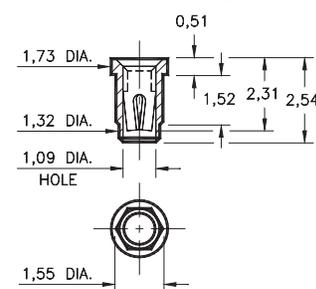


Basic Part Number	Height A
0903-0	21,36
0904-0	28,98

## 8252

8252-0-15-XX-30-XX-10-0

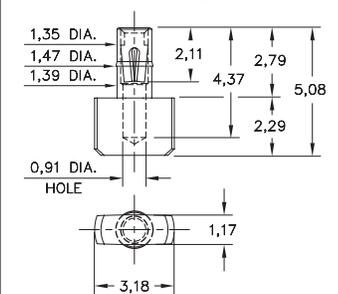
Press-fit in 1,45 plated through-hole



## 4078

4078-0-15-XX-30-XX-40-0

Press-fit in 1,45 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: **XXXX - X - 15 - XX - 30 - XX - XX - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#30 CONTACT (DATA ON PAGE 253)

(For alternate contact choices, see groups B and C on page 248)



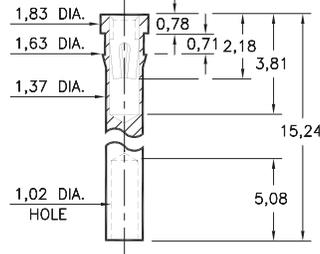
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 1707

1707-0-19-XX-30-XX-10-0

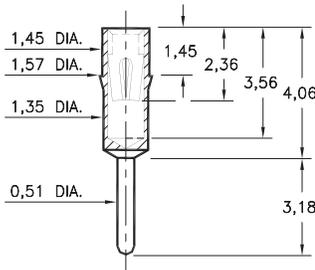
Press-fit in 1,55 mounting hole  
Wire Crimp Termination. Accepts wire sizes 22 AWG Max. / 24 AWG Min.



## 0240

0240-0-15-XX-30-XX-04-0

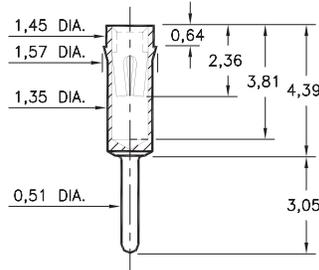
Press-fit in 1,49 mounting hole



## 0307

0307-0-15-XX-30-XX-04-0

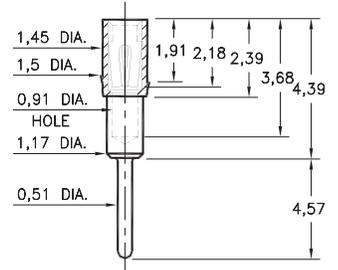
Press-fit in 1,5 mounting hole



## 1753

1753-0-15-XX-30-XX-04-0

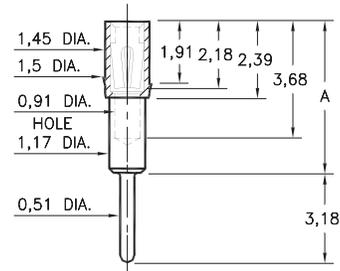
Press-fit in 1,45 mounting hole



## 1705/1706/1762

17XX-0-15-XX-3X-XX-04-0

Press-fit in 1,45 mounting hole

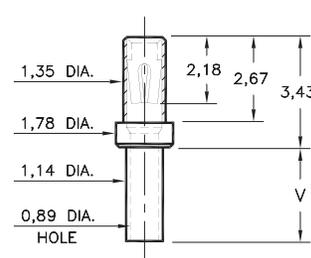


Basic Part Number	Height A
1705-0	4,19
1706-0	5,54
1762-0	7,62

## 0672

0672-X-15-XX-30-XX-10-0

Swage mount in 1,24 hole

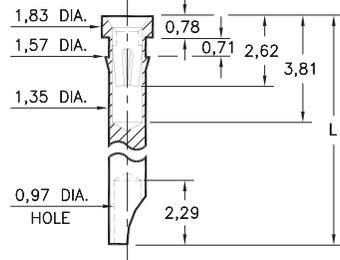


Basic Part Number	Board Thickness	Length V
0672-1	0,79	1,32
0672-2	1,57	2,13
0672-3	2,39	2,92
0672-4	3,18	3,71

## 1024/1104

1XX4-0-18-XX-30-XX-10-0

Press-fit in 1,5 mounting hole  
Accepts wire sizes up to 0,71 dia.

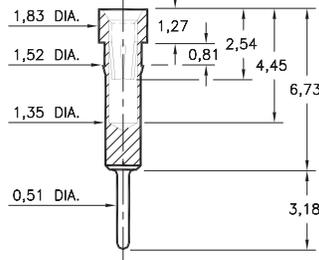


Basic Part Number	Length L
1024-0	7,37
1104-0	11,43

## 0498

0498-0-15-XX-35-XX-04-0

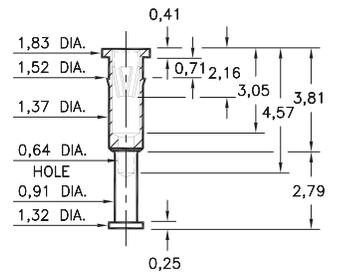
Press-fit in 1,45 mounting hole



## 8131

8131-0-15-XX-30-XX-10-0

Press-fit in 1,45 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: XXXX - X - 1X - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#30 or #35 CONTACT (DATA ON PAGE 253 & 254)

(For alternate contact choices, see groups B and C on page 248)



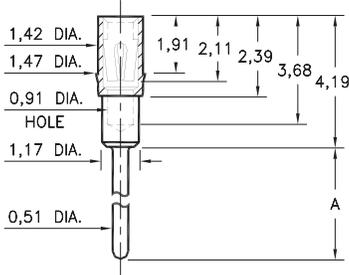
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 1802/3802/4030/8866

XXXX-0-15-XX-43-XX-04-0

Press-fit in 1,45 mounting hole

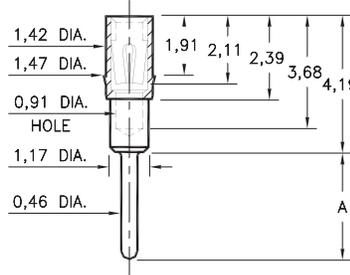


Basic Part Number	Length A
1802-0	3,18
3802-0	4,19
8866-0	19,69
4030-0	20,70

## 1803/1805/1808/3805

XXXX-0-15-XX-XX-XX-04-0

Press-fit in 1,45 mounting hole

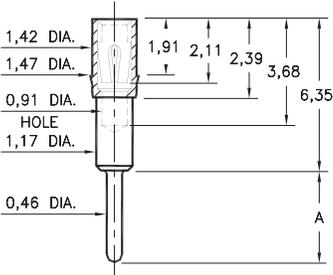


Basic Part Number	Length A
1808-0	2,54
1803-0	3,68
1805-0	5,41
3805-0	9,98

## 1804/1806

180X-0-15-XX-43-XX-04-0

Press-fit in 1,45 mounting hole

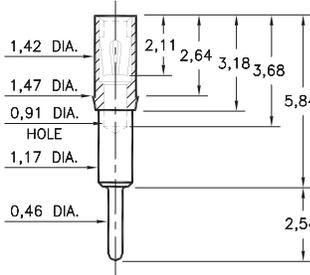


Basic Part Number	Length A
1804-0	2,03
1806-0	2,92

## 1807

1807-0-15-XX-43-XX-04-0

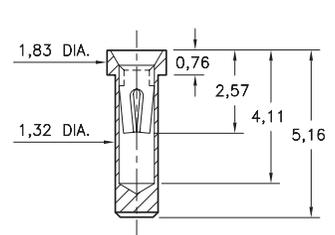
Press-fit in 1,45 mounting hole



## 4728

4728-15-XX-30-XX-10-0

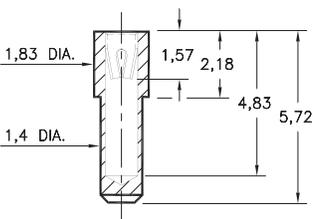
Solder mount in 1,37 min. mounting hole



## 8830

8830-15-XX-22-XX-10-0

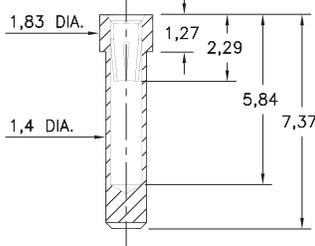
Solder mount in 1,45 min. mounting hole



## 8363

8363-0-15-XX-35-XX-10-0

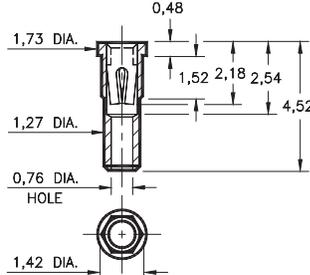
Solder mount in 1,45 min. mounting hole



## 4622

4622-0-15-XX-30-XX-10-0

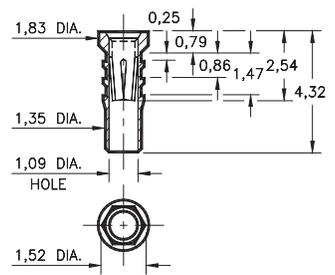
Hex press-fit in 1,35 plated through-hole



## 6252

6252-0-15-XX-32-XX-10-0

Hex press-fit in 1,45 plated through-hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: XXXX - X - 15 - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

02 2,54µm TIN/LEAD OVER NICKEL

◆ 84 2,54µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#22, #30, #32 or #43 CONTACT (DATA ON PAGES 252, 253 & 254)

(For alternate contact choices, see groups B and C on page 248)



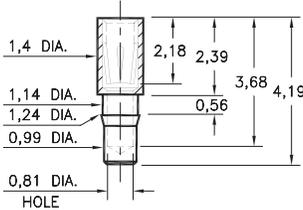
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 0385

0385-0-15-XX-43-XX-10-0

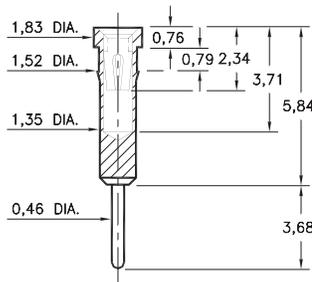
Press-fit in 1,17 mounting hole



## 4001

4001-0-15-XX-43-XX-04-0

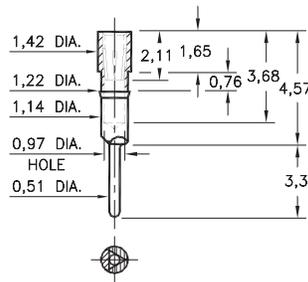
Press-fit in 1,45 mounting hole



## 1782

1782-0-15-XX-43-XX-04-0

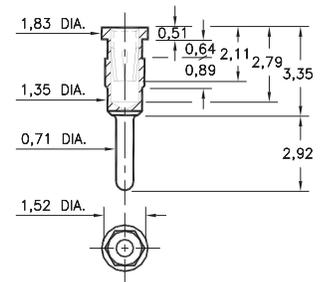
Press-fit in 1,14 mounting hole



## 5960

5960-0-15-XX-43-XX-04-0

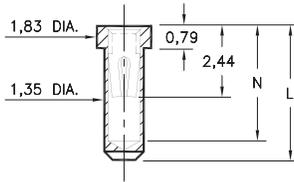
Hex press-fit in 1,45 plated through-hole



## 1401/3185

XXXX-0-15-XX-30-XX-10-0

Solder mount in 1,4 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
See page 194.3 for Tape & Reel details

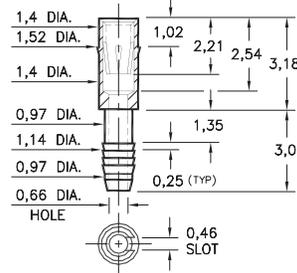


Basic Part Number	Length L	Depth N
1401-0	4,19	3,68
3185-0	3,30	2,77

## 4310

4310-0-31-XX-43-XX-04-0

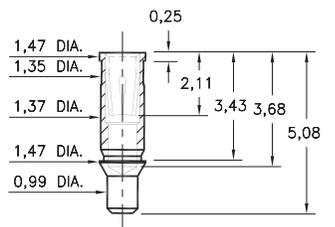
Compliant press-fit in 1,02 ± 0,08 plated through-hole. For 2,29 → 3,30 thick board



## 1385

1385-0-15-XX-43-XX-10-0

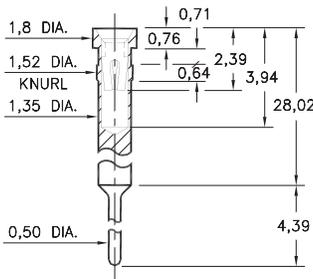
Surface mount



## 3018

3018-0-15-XX-30-XX-04-0

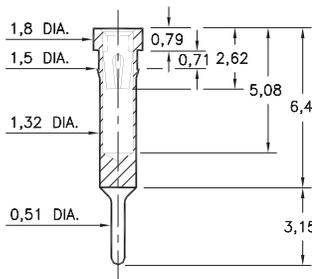
Press-fit in 1,45 mounting hole



## 8852

8852-0-15-XX-30-XX-04-0

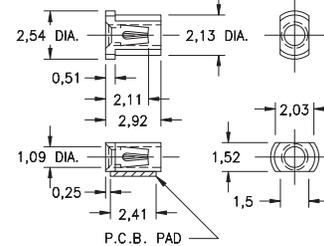
Press-fit in 1,42 mounting hole



## 3907

3907-0-18-XX-30-XX-10-0

Surface mount  
Also available on 12mm wide carrier tape:  
4,000 parts per 330mm reel  
See page 194.4 for Tape & Reel details



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30, #35 or #43 CONTACT (DATA ON PAGE 253 & 254)**  
(For alternate contact choices, see groups B and C on page 248)



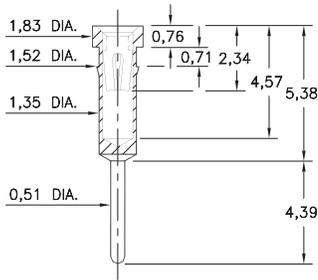
# PIN RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 8964

8964-0-15-XX-30-XX-04-0

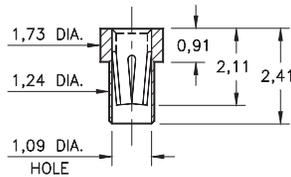
Press-fit in 1,45 mounting hole



## 5342

5342-0-15-XX-35-XX-10-0

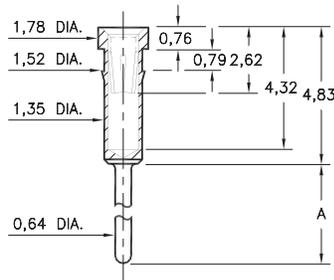
Solder mount in 1,3 min. mounting hole  
Also available on 8mm wide carrier tape:  
6,000 parts per 330mm reel  
See page 194.4 for Tape & Reel details



## 8857

8857-X-15-XX-32-XX-04-0

Press-fit in 1,45 mounting hole

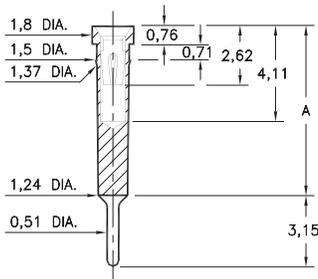


Basic Part Number	Length A
8857-0	7,9
8857-1	11,38
8857-2	14,96
8857-3	18,57
8857-4	22,12

## 8862/8877

88XX-0-15-XX-30-XX-04-0

Press-fit in 1,42 mounting hole

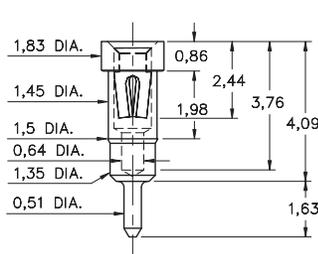


Basic Part Number	Length A
8862-0	7,62
8877-0	8,89

## 1334

1334-0-15-XX-30-XX-04-0

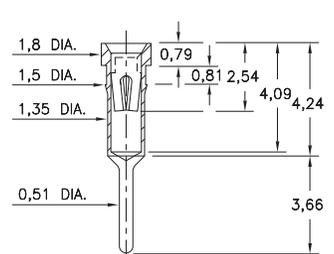
Press-fit in 1,45 mounting hole



## 8855

8855-0-15-XX-30-XX-34-0

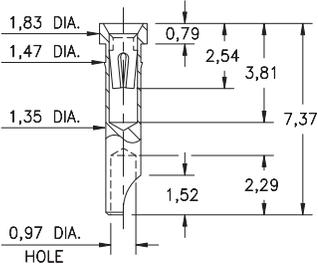
Press-fit in 1,45 mounting hole



## 2954

2954-0-18-XX-30-XX-10-0

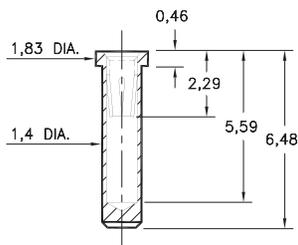
Press-fit in 1,45 mounting hole  
Accepts wire sizes up to 0,71 dia.



## 9363

9363-0-15-XX-35-XX-10-0

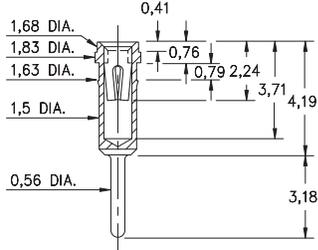
Solder mount in 1,45 min. mounting hole



## 1023

1023-0-15-XX-30-XX-04-0

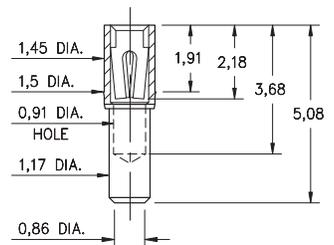
Press-fit in 1,55 mounting hole



## 1701

1701-0-15-XX-30-XX-10-0

Press-fit in 1,45 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

#30, #32 or #35 CONTACT (DATA ON PAGE 253 & 254)  
(For alternate contact choices, see groups B and C on page 248)



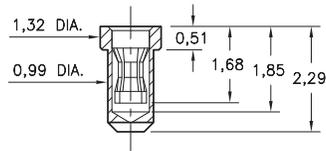
# PIN RECEPTACLES

FOR 0,46 - 0,58 DIAMETER PINS

## 0507

**0507-0-15-XX-31-XX-10-0**

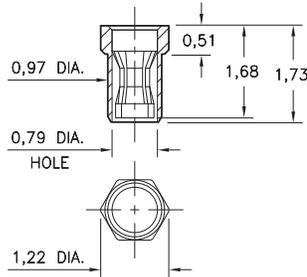
Solder mount in 1,07 min. mounting hole  
Also available on 16mm wide carrier tape:  
3,000 parts per 330mm reel  
See page 194.5 for Tape & Reel details

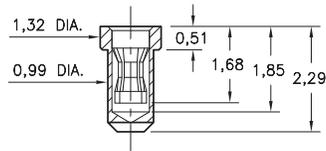
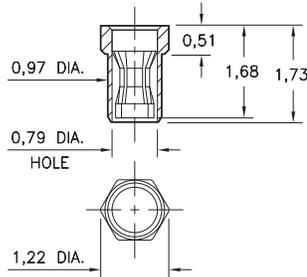


## 0531

**0531-0-15-XX-31-XX-10-0**

Hex press-fit in 1,14 plated through-hole  
(Top or Bottom entry capable)



<p><b>0507</b> <b>0507-0-15-XX-31-XX-10-0</b> Solder mount in 1,07 min. mounting hole Also available on 16mm wide carrier tape: 3,000 parts per 330mm reel See page 194.5 for Tape &amp; Reel details</p> 	<p><b>0531</b> <b>0531-0-15-XX-31-XX-10-0</b> Hex press-fit in 1,14 plated through-hole (Top or Bottom entry capable)</p> 		

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** 05XX - 0 - 15 - XX - 31 - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

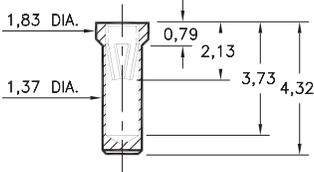
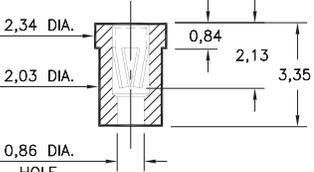
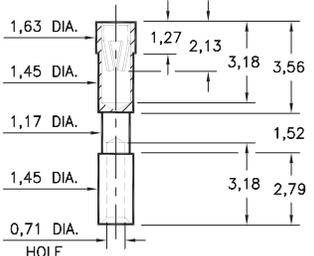
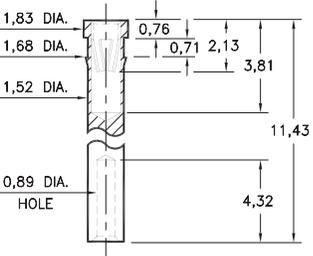
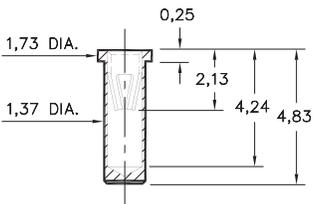
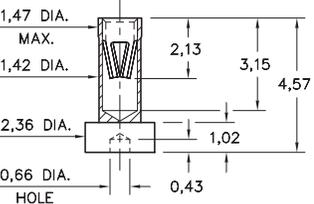
**SELECT CONTACT:**

**#31 CONTACT**

(For alternate contact choices, see group A on page 248)

# PIN RECEPTACLES

FOR 0,51 - 0,81 DIAMETER PINS

<p><b>0338</b>  <b>0338-0-15-XX-15-XX-10-0</b>                  Solder mount in 1,45 min. mounting hole                  Also available on 16mm wide carrier tape:                  1,700 parts per 330mm reel                  See page 194.6 for Tape &amp; Reel details</p> 	<p><b>0378</b>  <b>0378-0-15-XX-15-XX-10-0</b>                  Solder mount in 2,08 min. mounting hole</p> 	<p><b>6002</b>  <b>6002-0-19-XX-15-XX-10-0</b>                  Solder mount in 1,5 min. mounting hole                  Wire Termination. Accepts wire sizes                  26 AWG Max. / 30 AWG Min.</p> 	<p><b>7009</b>  <b>7009-0-19-XX-15-XX-10-0</b>                  Press-fit in 1,6 min. mounting hole                  Wire Termination. Accepts wire sizes                  22 AWG Max. / 26 AWG Min.</p> 
<p><b>0339</b>  <b>0339-0-15-XX-15-XX-10-0</b>                  Solder mount in 1,45 min. mounting hole                  Also available on 24mm wide carrier tape:                  1,540 parts per 330mm reel                  See page 194.6 for Tape &amp; Reel details</p> 	<p><b>5200</b>  <b>5200-0-19-XX-15-27-10-0</b>                  Surface mount on a 2,62 dia. P.C.B. pad</p> 		

**SPECIFICATIONS:**

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ± 0,13  
 Diameters: ± 0,051  
 Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 15 - XX - 10 - 0

**BASIC PART #**

- SPECIFY SHELL FINISH:**
- 01 5,08µm TIN/LEAD OVER NICKEL
  - ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
  - ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#15 CONTACT (DATA ON PAGE 254)**

(For alternate contact choices, see group K on page 248)



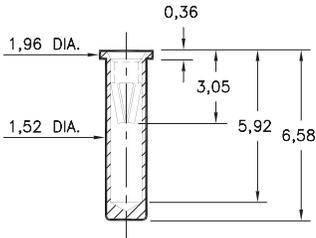
# PIN RECEPTACLES

FOR 0,56 - 0,81 DIAMETER PINS

## 0295

0295-0-15-XX-06-XX-10-0

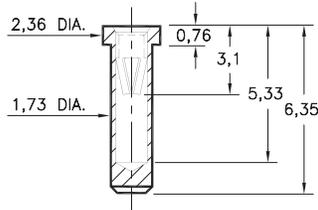
Solder mount in 1,60 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,000 parts per 330mm reel  
See page 194.7 for Tape & Reel details



## 0292

0292-0-15-XX-06-XX-10-0

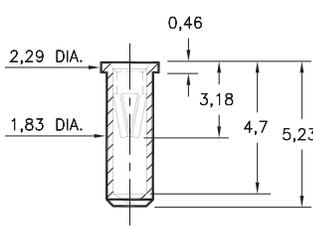
Solder mount in 1,8 min. mounting hole



## 0294

0294-0-15-XX-06-XX-10-0

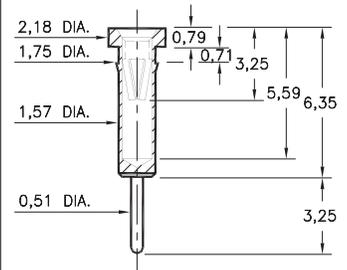
Solder mount in 1,93 min. mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
See page 194.7 for Tape & Reel details



## 0398

0398-0-15-XX-06-XX-04-0

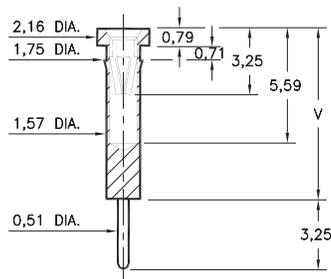
Press-fit in 1,68 mounting hole



## 0397

0397-X-15-XX-06-XX-04-0

Press-fit in 1,68 mounting hole

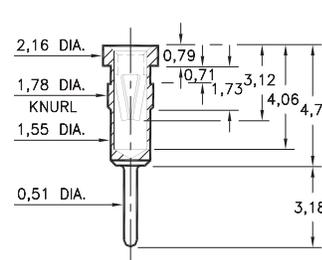


Basic Part Number	Length V
0397-0	8,97
0397-1	8,46
0397-2	10,49

## 0297

0297-0-15-XX-06-XX-04-0

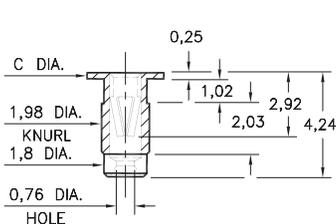
Press-fit in 1,7 mounting hole



## 9019/9039

90X9-0-19-XX-06-XX-10-0

Press-fit in 1,91 mounting hole



Basic Part Number	Head Dia. C
9019-0	3,18
9039-0	2,54

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 06 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

#06 CONTACT (DATA ON PAGE 255)

(For alternate contact choices, see group D on page 248)



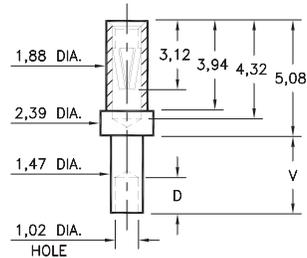
# PIN RECEPTACLES

FOR 0,56 - 0,81 DIAMETER PINS

## 0326

0326-X-19-XX-06-XX-10-0

Swage mount in 1,52 hole

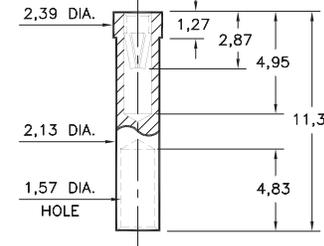


Basic Part Number	Board Thickness	Length V	Depth D
0326-1	0,79	1,57	1,02
0326-2	1,57	2,39	1,57
0326-3	2,39	3,18	1,57
0326-4	3,18	3,96	1,57

## 5295

5295-0-19-XX-06-XX-10-0

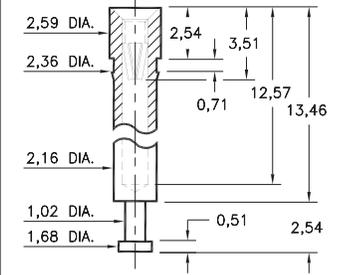
Solder mount in 2,18 min. mounting hole  
Wire Crimp Termination. Accepts wire sizes 18 AWG Max. / 22 AWG Min.



## 0396

0396-0-15-XX-06-XX-10-0

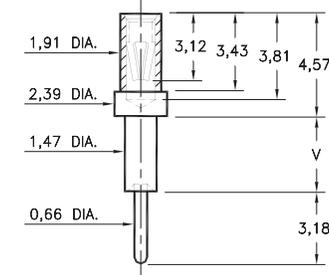
Press-fit in 2,29 mounting hole



## 0298

0298-X-15-XX-06-XX-10-0

Swage mount in 1,52 hole

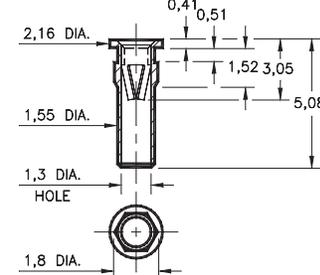


Basic Part Number	Board Thickness	Length V
0298-1	0,79	1,3
0298-2	1,57	2,08
0298-3	2,39	2,87
0298-4	3,18	3,68

## 9293

9293-0-15-XX-06-XX-10-0

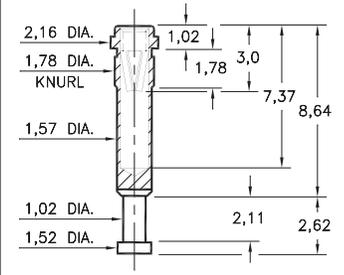
Hex press-fit in 1,7 plated through-hole



## 8864

8864-0-15-XX-06-XX-10-0

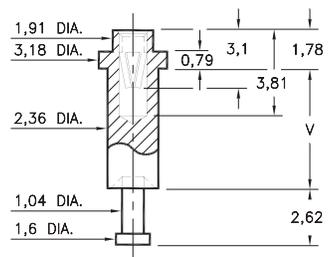
Press-fit in 1,7 mounting hole



## 0664

0664-X-15-XX-06-XX-10-0

Swage mount in 2,44 hole



Basic Part Number	Board Thickness	Length V
0664-1	2,39	3,18
0664-2	3,18	3,96
0664-3	4,78	5,56

### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ±0,13

Diameters: ±0,051

Angles: ±2°



ORDER CODE: **XXXX - X - 1X - XX - 06 - XX - 10 - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,04µm TIN/LEAD OVER NICKEL
- ◆ 80 5,04µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#06 CONTACT (DATA ON PAGE 255)

(For alternate contact choices, see group D on page 248)



# PIN RECEPTACLES

FOR 0,56 - 0,86 DIAMETER PINS AND 0,64 SQUARE PINS

<p><b>0291</b> 0291-0-15-XX-16-XX-10-0 Hex press-fit in 1,7 plated through-hole</p>	<p><b>0293</b> 0293-0-15-XX-16-XX-10-0 Press-fit in 1,7 mounting hole</p>	<p><b>0287</b> 0287-0-15-XX-16-XX-10-0 Solder mount in 1,65 min. mounting hole Also available on 8mm wide carrier tape: 3,250 parts per 330mm reel See page 194.8 for Tape &amp; Reel details</p>	<p><b>0285</b> 0285-0-15-XX-16-XX-10-0 Solder mount in 1,65 min. mounting hole</p>
<p><b>0284</b> 0284-0-15-XX-16-XX-10-0 Solder mount in 1,78 min. mounting hole</p>	<p><b>8114</b> 8114-0-15-XX-16-XX-04-0 Press-fit from underside of pc board into 1,65 mounting hole</p>	<p><b>0407</b> 0407-0-15-XX-16-XX-04-0 Press-fit in 1,68 mounting hole</p>	<p><b>0415</b> 0415-0-15-XX-16-XX-10-0 Solder mount in 1,6 min. mounting hole Also available on 24mm wide carrier tape: 1,500 parts per 330mm reel See page 194.8 for Tape &amp; Reel details</p>
<p><b>0303</b> 0303-0-19-XX-16-XX-10-0 Press-fit in 1,7 mounting hole Wire Crimp Termination. Accepts wire sizes 26 AWG Max. / 30 AWG Min.</p>	<p><b>0306</b> 0306-0-19-XX-16-XX-10-0 Wire Crimp Termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.</p>	<p><b>0273</b> 0273-0-15-XX-16-XX-10-0 Press-fit in 1,98 mounting hole</p>	<p><b>7520</b> 7520-0-15-XX-16-XX-10-0 Press-fit in 1,68 mounting hole</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 16 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,04µm TIN/LEAD OVER NICKEL
- ◆ 80 5,04µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,04µm TIN/LEAD OVER NICKEL
- ◆ 80 5,04µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#16 CONTACT (DATA ON PAGE 256)**

(For alternate contact choices, see group D on page 248)



# PIN RECEPTACLES

FOR 0,56 - 0,86 DIAMETER PINS AND 0,64 SQUARE PINS

<p><b>9808</b> 9808-0-15-XX-16-XX-04-0 Press-fit in 1,70 mounting hole</p>	<p><b>9101</b> 9101-0-15-XX-16-XX-10-0 Press-fit in 1,70 mounting hole</p>	<p><b>5650</b> 5650-0-19-XX-16-XX-10-0 Press-fit in 1,70 mounting hole</p>	<p><b>8679</b> 8679-0-15-XX-16-XX-10-0 Solder mount in 1,80 min. mounting hole</p>						
<p><b>6021</b> 6021-0-15-XX-16-XX-10-0 Solder mount in 1,57 min. mounting hole Also available on 24mm wide carrier tape: 1,500 parts per 330mm reel See page 194.8 for Tape &amp; Reel details</p>	<p><b>1873</b> 1873-0-15-XX-16-XX-04-0 Press-fit in 1,68 mounting hole</p>	<p><b>8827</b> 8827-0-15-XX-16-XX-04-0 Press-fit in 1,55 mounting hole</p>	<p><b>5070</b> 5070-0-18-XX-16-XX-10-0 Press-fit in 1,55 mounting hole</p>						
<p><b>7620</b> 7620-0-34-XX-16-XX-10-0 Double Ended Receptacle. See chart for Contact number &amp; acceptance ranges</p> <table border="1" data-bbox="487 1344 779 1596"> <thead> <tr> <th>Contact Number</th> <th>Acceptance Range</th> </tr> </thead> <tbody> <tr> <td>(a) #16</td> <td>0,56 - 0,86 and 0,64 □</td> </tr> <tr> <td>(b) #34</td> <td>0,81 - 1,17</td> </tr> </tbody> </table> <p>(Data on Page 258)</p>		Contact Number	Acceptance Range	(a) #16	0,56 - 0,86 and 0,64 □	(b) #34	0,81 - 1,17		
Contact Number	Acceptance Range								
(a) #16	0,56 - 0,86 and 0,64 □								
(b) #34	0,81 - 1,17								

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ±0,13  
 Diameters: ±0,051  
 Angles: ±2°



ORDER CODE: **XXXX - X - XX - XX - 16 - XX - 10 - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#16 CONTACT (DATA ON PAGE 256)

(For alternate contact choices, see group D on page 248)

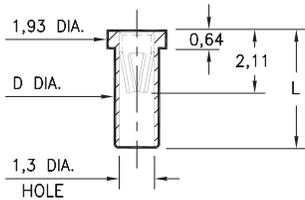


# PIN RECEPTACLES

FOR 0,64 - 0,94 DIAMETER PINS AND 0,64 SQUARE PINS

## 0305

**0305-X-15-XX-47-XX-10-0**  
Solder mount in 1,5/1,55 mounting hole  
Also available on 8mm or 24mm wide carrier tape: See chart for details  
See page 194.9 for Tape & Reel details



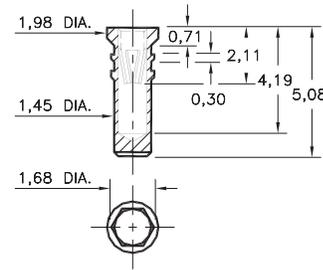
Basic Part Number	Length L	Dia. D
0305-0	2,41	1,42
0305-1	2,67	1,47
0305-2	3,94	1,47

### T&R Packaging

Basic Part Number	Tape Width	Parts per 330mm Reel
0305-0	8mm	6,000
0305-1	8mm	6,000
0305-2	24mm	1,500

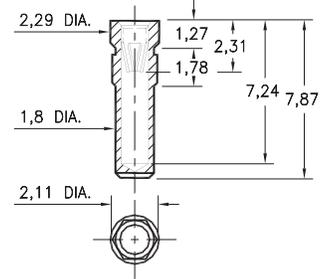
## 0279

**0279-0-15-XX-47-XX-10-0**  
Hex press-fit in 1,57 plated through-hole



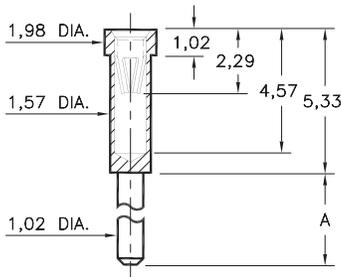
## 0330

**0330-0-15-XX-47-XX-10-0**  
Hex press-fit in 2,01 plated through-hole



## 0300/8300

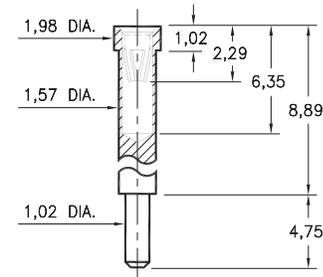
**X300-X-15-XX-47-XX-10-0**  
Solder mount in 1,07 min. mounting hole



Basic Part Number	Length A
0300-1	2,79
0300-2	4,75
8300-0	3,56

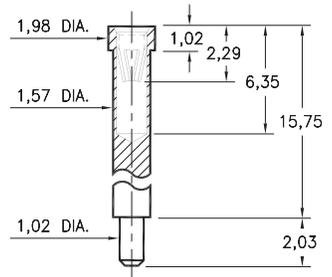
## 0301

**0301-1-15-XX-47-XX-10-0**  
Solder mount in 1,07 min. mounting hole



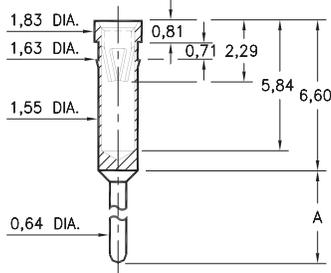
## 0309

**0309-2-15-XX-47-XX-10-0**  
Solder mount in 1,07 min. mounting hole



## 0399

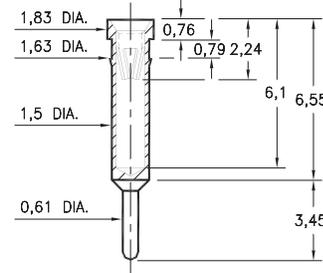
**0399-X-15-XX-47-XX-04-0**  
Press-fit in 1,55 mounting hole



Basic Part Number	Length A
0399-0	5,84
0399-1	4,57

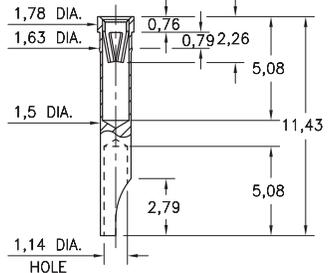
## 1304

**1304-0-15-XX-47-XX-04-0**  
Press-fit in 1,55 mounting hole



## 1134

**1134-0-18-15-47-27-10-0**  
Press-fit in 1,55 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ±0,13  
Diameters: ±0,051  
Angles: ±2°



ORDER CODE: **XXXX - X - XX - XX - 47 - XX - XX - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

**#47 CONTACT (DATA ON PAGE 256)**

(For alternate contact choices, see group D on page 248)



# COMPLIANT TAIL PINS & RECEPTACLES

## DESIGNED FOR A SECURE PRESS-FIT IN STANDARD PLATED THROUGH-HOLES

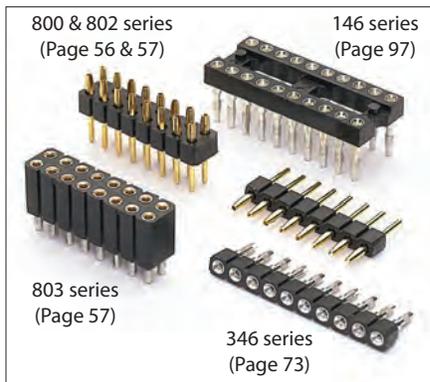
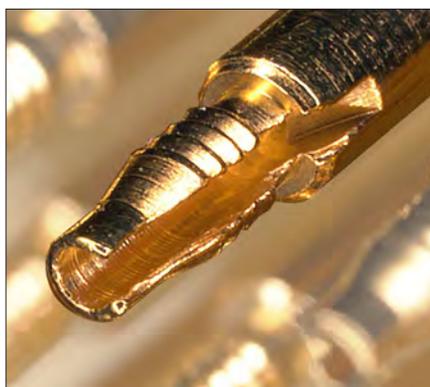
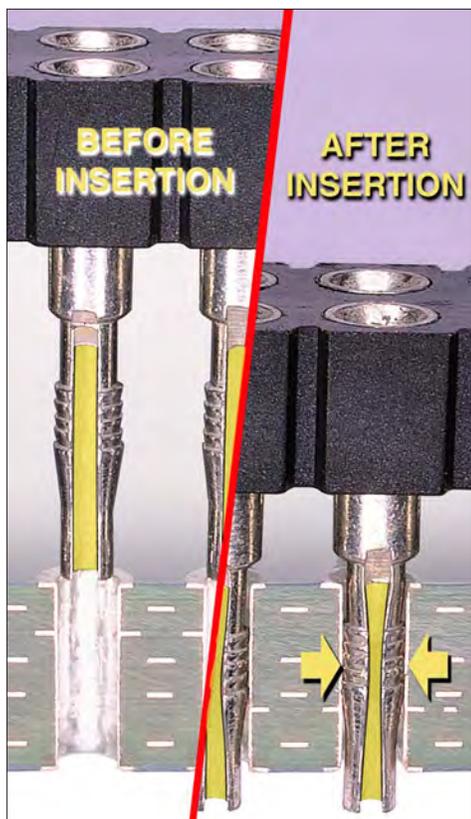
The unique compliant pin design is characterized by a hollow and slotted tail that closes down and conforms to the size of the plated through-hole, thus preventing damage. In addition, the combination of slotted tail and a series of fine serrations make a reliable gas-tight connection with the plating inside the hole.

Mill-Max offers sockets, headers and discrete pins and receptacles with compliant tail or barrel features to address a broad range of applications where press-fitting is the desired solution over soldering. Mill-Max compliant tail sockets are available in dual-in-line packages (Series 146) and single and double row strips (Series 346 and 446, respectively).

For higher current and more rugged applications, Mill-Max has single row (Series 800) and double row (Series 802) interconnects and mating sockets, single row (Series 801) and double row (Series 803). Multi-layer boards can be stacked by mating these pin headers with sockets containing highly reliable six-finger inner contacts that accept 0,76 diameter round pins as well as 0,64 square pins.

Both compliant tail sockets and interconnects are available in two tail lengths, one for 1,52 - 2,54 thick panels and another for 2,29 - 3,30 thick panels.

Discrete pins (P/N's 5601, 5602 & 2617) and receptacles (P/N's 4993 & 4994) are useful for single location requirements or for non-standard layouts. The receptacles are low profile. The 4993 accepts leads from 0,3 - 0,43 and 4994 accepts leads from 0,38 - 0,51.



# PIN RECEPTACLES

FOR 0,64 - 0,94 DIAMETER PINS AND 0,64 SQUARE PINS

<p><b>1305</b> 1305-0-15-XX-47-XX-04-0 Press-fit in 1,55 mounting hole</p>	<p><b>1306</b> 1306-0-15-XX-47-XX-04-0 Press-fit in 1,55 mounting hole</p>	<p><b>7305</b> 7305-0-15-XX-47-XX-10-0 Solder mount in 1,52 min. mounting hole Also available on 8mm wide carrier tape: 6,000 parts per 330mm reel See page 194.9 for Tape &amp; Reel details</p>	<p><b>0400</b> 0400-0-15-XX-47-XX-04-0 Press-fit in 1,7 mounting hole</p>
<p><b>0335</b> 0335-0-15-XX-47-XX-04-0 Hex press-fit in 1,63 plated through-hole</p>	<p><b>4614</b> 4614-0-31-XX-47-XX-04-0 Compliant press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board</p>	<p><b>4615</b> 4615-0-31-XX-47-XX-04-0 Compliant press-fit in 1,02 ± 0,08 plated hole. For 2,29 → 3,30 thick board</p>	<p><b>7614</b> 7614-0-31-XX-47-XX-04-0 Compliant press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board</p>
<p><b>8401</b> 8401-0-15-XX-47-XX-04-0 Hex press-fit in 1,6 plated through-hole</p>	<p><b>2400</b> 2400-0-15-XX-47-XX-04-0 Press-fit in 1,68 mounting hole</p>	<p><b>6857</b> 6857-0-15-XX-47-XX-10-0 Press-fit in 1,55 mounting hole</p>	<p><b>9393</b> 9393-0-15-XX-47-XX-10-0 Press-fit in 1,70 mounting hole</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 47 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#47 CONTACT (DATA ON PAGE 256)**

(For alternate contact choices, see group D on page 248)



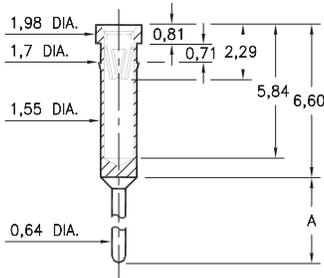
# PIN RECEPTACLES

FOR 0,64 - 0,94 DIAMETER PINS AND 0,64 SQUARE PINS

## 0401/6401

X401-0-15-XX-47-XX-04-0

Press-fit in 1,63 mounting hole

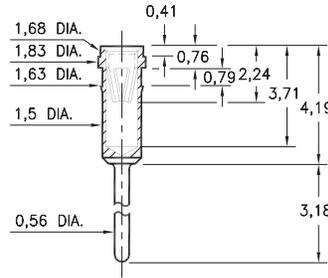


Basic Part Number	Length A
0401-0	8,64
6401-0	13,72

## 1303

1303-0-15-XX-47-XX-04-0

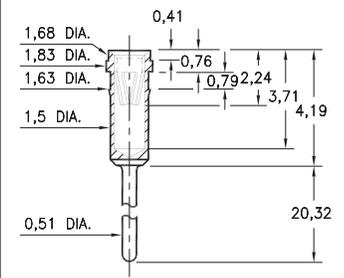
Press-fit in 1,55 mounting hole



## 8303

8303-0-15-XX-47-XX-04-0

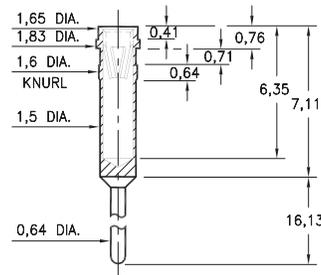
Press-fit in 1,55 mounting hole



## 4095

4095-0-15-XX-47-XX-04-0

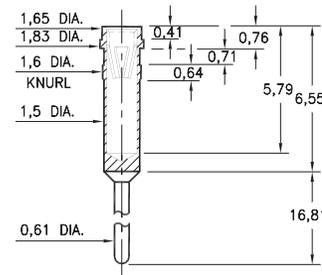
Press-fit in 1,55 mounting hole



## 4014

4014-0-15-XX-47-XX-04-0

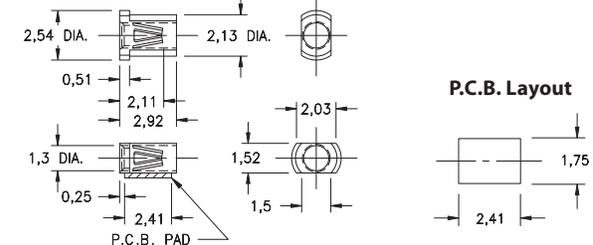
Press-fit in 1,55 mounting hole



## 8806

8806-0-18-XX-47-XX-40-0

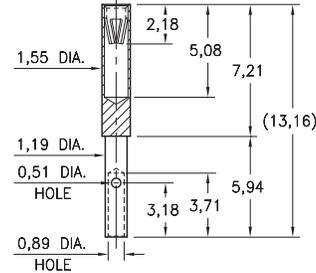
Surface mount  
Also available on 12mm wide carrier tape:  
4,000 parts per 330mm reel  
See page 194.9 for Tape & Reel details



## 0722

0722-0-33-XX-47-XX-10-0

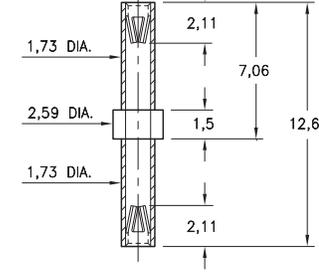
Wire crimp termination. Accepts wire sizes 22 AWG Max. / 28 AWG Min.



## 6839

6839-0-40-XX-47-XX-10-0

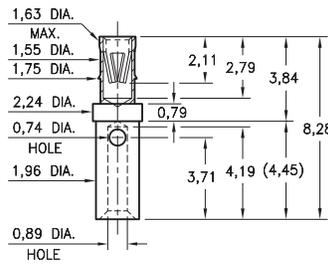
Double Ended Receptacle



## 6368

6368-0-33-XX-47-XX-10-0

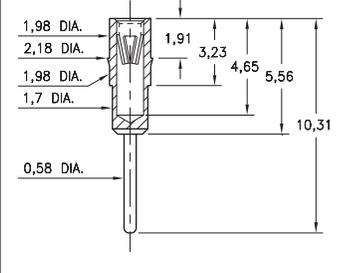
Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.



## 4119

4119-0-15-XX-47-XX-04-0

Press-fit in 2,11 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 47 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

#47 CONTACT (DATA ON PAGE 256)

(For alternate contact choices, see group D on page 248)



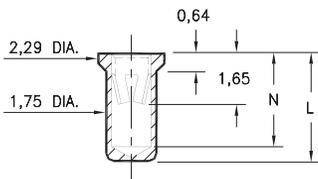
# PIN RECEPTACLES

FOR 0,94 - 1,09 DIAMETER PINS

## 0331/9353

X3XX-0-15-XX-18-XX-10-0

Solder mount in 1,80 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,000 parts per 330mm reel  
See page 194.10 for Tape & Reel details

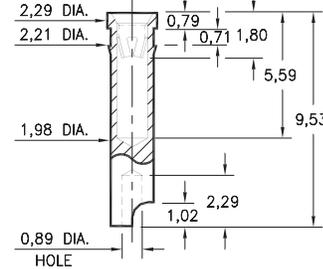


Basic Part Number	Length L	Depth N
0331-0	3,81	3,23
9353-0	4,32	3,73

## 7405

7405-0-18-XX-18-XX-10-0

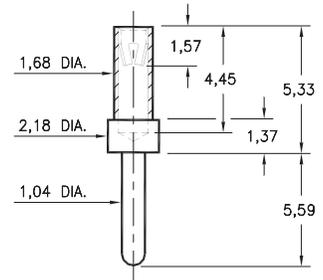
Press-fit in 2,13 mounting hole  
Accepts wire sizes up to 0,64 dia.



## 3450

3450-0-15-XX-18-XX-04-0

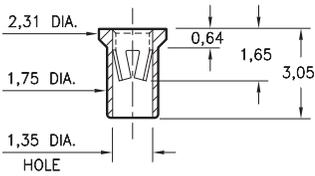
Solder mount in 1,09 min. mounting hole



## 7406

7406-0-15-XX-18-XX-10-0

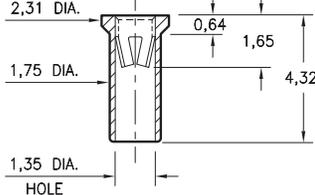
Solder mount in 1,80 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel  
See page 194.10 for Tape & Reel details



## 9354

9354-0-15-XX-18-XX-10-0

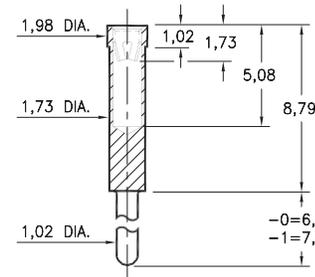
Solder mount in 1,80 min. mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
See page 194.10 for Tape & Reel details



## 0319

0319-X-15-XX-18-XX-04-0

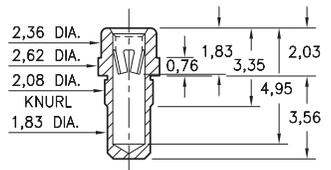
Solder mount in 1,07 min. mounting hole



## 9357

9357-0-15-XX-18-XX-10-0

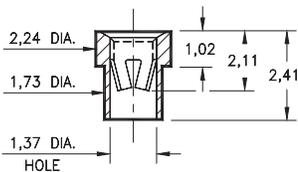
Press-fit in 1,98 mounting hole



## 3520

3520-0-15-XX-18-XX-10-0

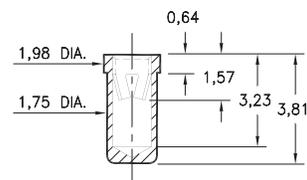
Solder mount in 1,78 min. mounting hole



## 8331

8331-0-15-XX-18-XX-10-0

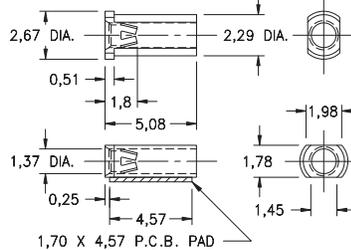
Solder mount in 1,80 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,900 parts per 330mm reel  
See page 194.10 for Tape & Reel details



## 6628

6628-0-18-XX-18-XX-10-0

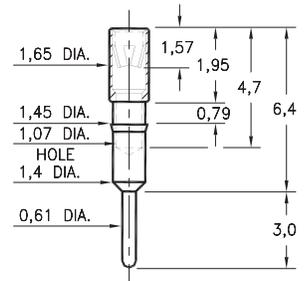
Surface mount  
Also available on 12mm wide carrier tape:  
3,700 parts per 330mm reel  
See page 194.10 for Tape & Reel details



## 1313

1313-0-15-XX-18-XX-04-0

Press-fit in 1,42 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



ORDER CODE: XXXX - X - XX - 18 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

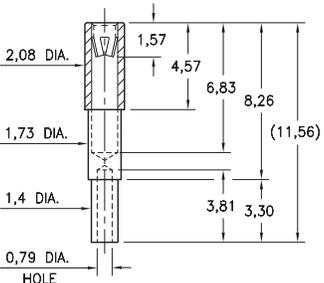
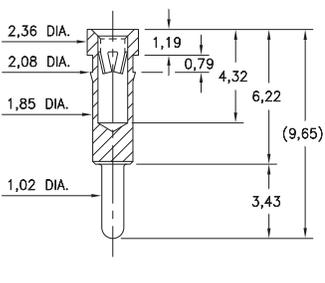
#18 CONTACT (DATA ON PAGE 257)

(For alternate contact choices, see group L on page 248)



# PIN RECEPTACLES

FOR .037" - .043" DIAMETER PINS

<p><b>4314</b>  <b>4314-0-19-XX-18-XX-10-0</b>          Wire crimp termination.          Accepts wire sizes up to 24 AWG</p> 	<p><b>4401</b>  <b>4401-0-15-XX-18-XX-04-0</b>          Press-fit in 2,01 mounting hole</p> 		

**SPECIFICATIONS:**

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions: Millimeters**  
**Tolerances On:** Lengths: ± 0,13  
 Diameters: ± 0,051  
 Angles: ± 2°



**ORDER CODE: XXXX - 0 - 15 - XX - 18 - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#18 CONTACT (DATA ON PAGE 257)**

(For alternate contact choices, see group L on page 248)

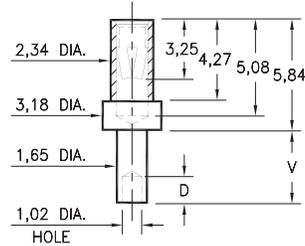
# PIN RECEPTACLES

FOR 0,81 - 1,17 DIAMETER PINS

## 0344

0344-X-19-XX-34-XX-10-0

Swage mount in 1,70 hole

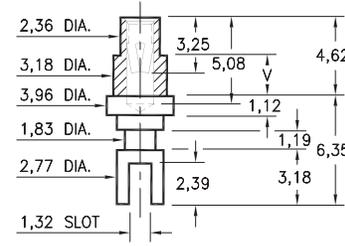


Basic Part Number	Board Thickness	Length V	Depth D
0344-1	0,78	1,57	1,02
0344-2	1,57	2,39	1,57
0344-3	2,39	3,18	1,57
0344-4	3,18	3,96	1,57

## 0349

0349-X-31-XX-34-XX-10-0

Swage mount in 3,28 hole

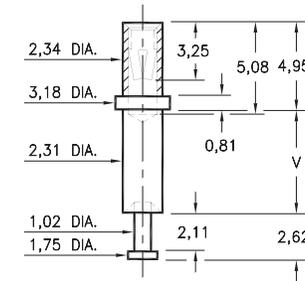


Basic Part Number	Board Thickness	Length V
0349-2	1,57	2,39
0349-3	2,39	3,18
0349-4	3,18	3,96

## 0323

0323-X-15-XX-34-XX-10-0

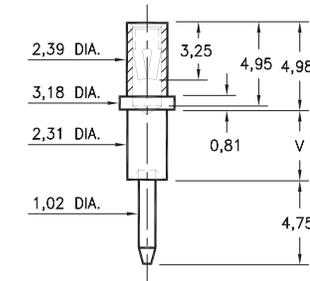
Swage mount in 2,39 hole



## 0324

0324-X-15-XX-34-XX-10-0

Swage mount in 2,39 hole

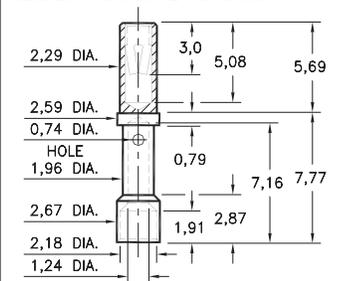


Basic Part Number	Board Thickness	Length V
032X-1	0,79	1,57
032X-2	1,57	2,39
032X-3	2,39	3,18
032X-4	3,18	3,96
032X-5	4,78	5,56

## 0348

0348-0-33-XX-34-XX-10-0

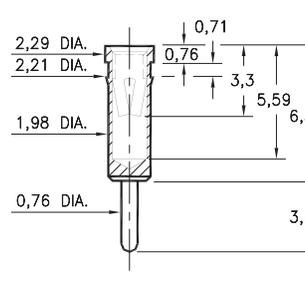
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



## 0405

0405-0-15-XX-34-XX-04-0

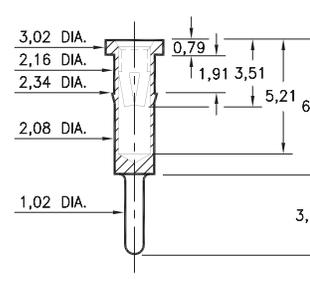
Press-fit in 2,13 mounting hole



## 0336

0336-0-15-XX-34-XX-04-0

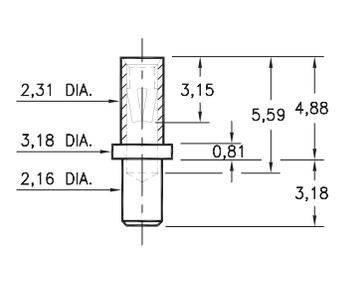
Press-fit in 2,26 mounting hole



## 0322

0322-0-15-XX-34-XX-10-0

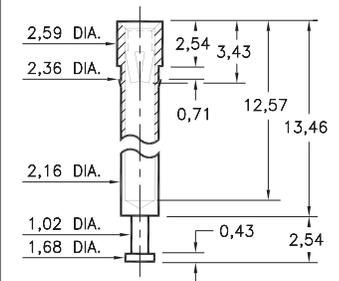
Solder mount in 2,26 min. mounting hole



## 0325

0325-0-15-XX-34-XX-10-0

Press-fit in 2,29 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ±0,13

Diameters: ±0,051

Angles: ±2°



ORDER CODE: XXXX - X - XX - XX - 34 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#34 CONTACT (DATA ON PAGE 258)

(For alternate contact choices, see group E on page 248)

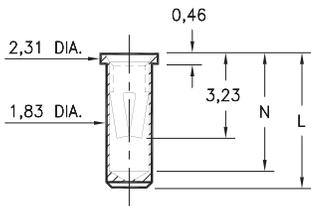


# PIN RECEPTACLES

FOR 0,81 - 1,17 DIAMETER PINS

## 0327/0351/0373

**03XX-0-15-XX-34-XX-10-0**  
Solder mount in 1,91 min. mounting hole  
Also available on 12mm or 24mm wide carrier tape: See chart for details  
See page 194.11 for Tape & Reel details



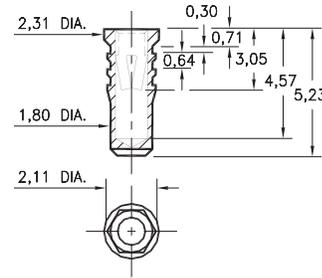
Basic Part Number	Length L	Depth N
<b>0327-0</b>	5,23	4,57
<b>0351-0</b>	5,74	5,08
<b>0373-0</b>	6,86	6,12

### T&R Packaging

Basic Part Number	Tape Width	Parts per 330mm Reel
<b>0327-0</b>	12mm	1,400
<b>0351-0</b>	24mm	1,100
<b>0373-0</b>	24mm	1,000

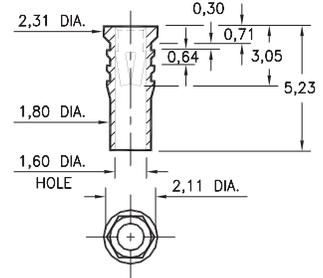
## 0328

**0328-0-15-XX-34-XX-10-0**  
Hex press-fit in 2,01 plated through-hole



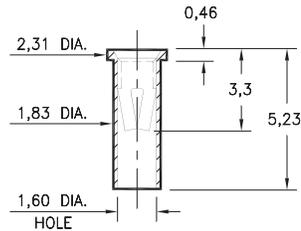
## 0334

**0334-0-15-XX-34-XX-10-0**  
Hex press-fit in 2,01 plated through-hole



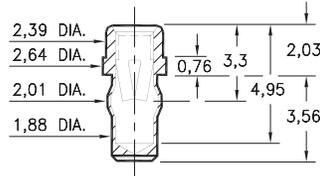
## 0312

**0312-0-15-XX-34-XX-10-0**  
Solder mount in 1,91 min. mounting hole  
Also available on 12mm or 24mm wide carrier tape: 1,400 parts per 330mm reel  
See page 194.11 for Tape & Reel details



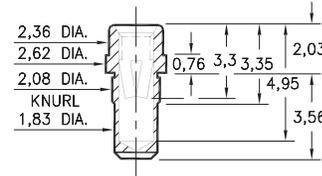
## 0333

**0333-0-42-XX-34-XX-10-0**  
Press-fit in 1,93 mounting hole



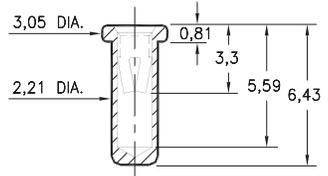
## 0357

**0357-0-15-XX-34-XX-10-0**  
Press-fit in 1,98 mounting hole



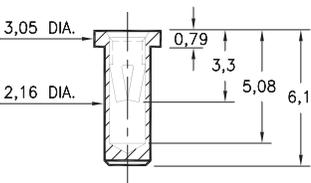
## 0317

**0317-0-15-XX-34-XX-04-0**  
Solder mount in 2,31 min. mounting hole



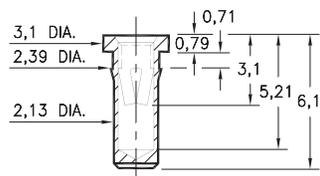
## 0340

**0340-0-15-XX-34-XX-10-0**  
Solder mount in 2,21 min. mounting hole  
Also available on 24mm wide carrier tape: 1,250 parts per 330mm reel  
See page 194.11 for Tape & Reel details



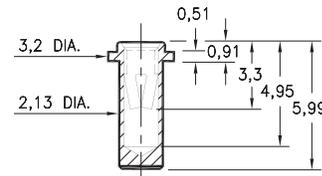
## 0345

**0345-0-15-XX-34-XX-10-0**  
Press-fit in 2,26 mounting hole



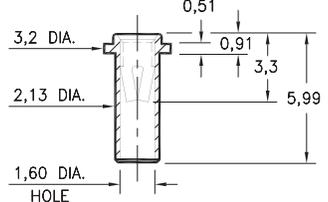
## 0316

**0316-0-15-XX-34-XX-10-0**  
Solder mount in 2,21 min. mounting hole



## 0314

**0314-0-15-XX-34-XX-10-0**  
Solder mount in 2,21 min. mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 34 - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#34 CONTACT (DATA ON PAGE 258)**

(For alternate contact choices, see group E on page 248)



# PIN RECEPTACLES

FOR 0,81 - 1,17 DIAMETER PINS

<p><b>0359</b> <b>0359-0-15-XX-34-XX-10-0</b> Press-fit in 2,29 mounting hole</p>	<p><b>0358</b> <b>0358-0-15-XX-34-XX-10-0</b> Press-fit in 2,29 mounting hole</p>	<p><b>0360</b> <b>0360-0-15-XX-34-XX-10-0</b> Press-fit in 2,29 mounting hole</p>	<p><b>0343</b> <b>0343-0-15-XX-34-XX-10-0</b> Press-fit in 2,29 mounting hole</p>
<p><b>0356</b> <b>0356-0-15-XX-34-XX-10-0</b> Solder mount in 2,59 min. mounting hole Also available on 24mm wide carrier tape: 1,100 parts per 330mm reel See page 194.11 for Tape &amp; Reel details</p>	<p><b>6659</b> <b>6659-0-15-XX-34-XX-10-0</b> Solder mount in 2,59 min. mounting hole</p>	<p><b>0347</b> <b>0347-0-15-XX-34-XX-10-0</b> Solder mount in 3,05 min. mounting hole</p>	<p><b>0329</b> <b>0329-0-15-XX-34-XX-10-0</b> Solder mount in 1,91 min. mounting hole. "Knock out" bottom</p>
<p><b>0814</b> <b>0814-0-15-XX-34-XX-04-0</b> Solder mount in 2,08 min. mounting hole</p>	<p><b>5059</b> <b>5059-0-15-XX-34-XX-04-0</b> Press-fit in 2,29 mounting hole</p>	<p><b>8360</b> <b>8360-0-15-XX-34-XX-10-0</b> Press-fit in 2,21 mounting hole</p>	<p><b>9359</b> <b>9359-0-15-XX-34-XX-10-0</b> Press-fit in 2,29 mounting hole</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ±0,13

Diameters: ±0,051

Angles: ±2°



**ORDER CODE:** XXXX - X - XX - **XX - 34** - **XX** - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#34 CONTACT (DATA ON PAGE 258)**

(For alternate contact choices, see group E on page 248)



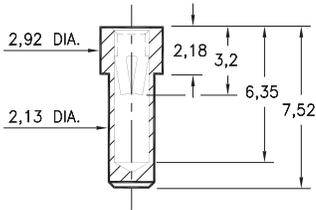
# PIN RECEPTACLES

FOR 0,81 - 1,17 DIAMETER PINS

## 8838

8838-0-15-XX-34-XX-10-0

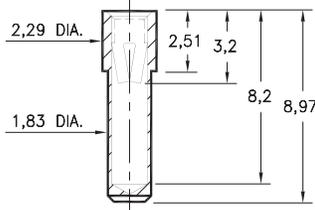
Solder mount in 2,18 min. mounting hole



## 3100

3100-0-15-XX-34-XX-10-0

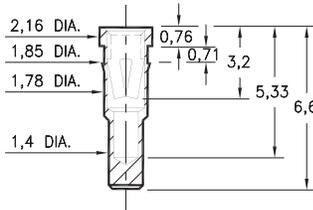
Solder mount in 1,88 min. mounting hole



## 8853

8853-0-15-XX-34-XX-10-0

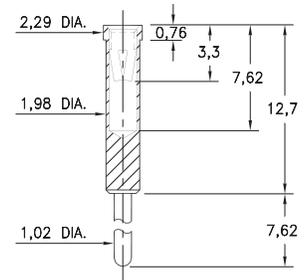
Press-fit in 1,8 mounting hole



## 6800

6800-0-15-XX-34-XX-04-0

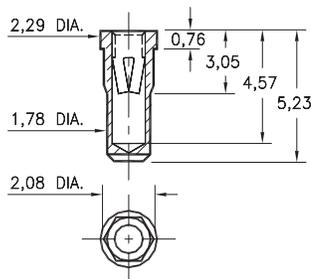
Solder mount in 2,03 min. mounting hole



## 0739

0739-0-15-XX-34-XX-10-0

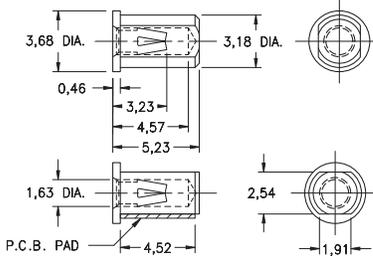
Hex press-fit in 1,98 plated through-hole



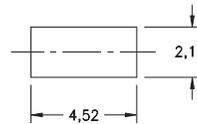
## 8206

8206-0-15-XX-34-XX-40-0

Surface mount, board edge  
Also available on 16mm wide carrier tape:  
Packaged Vertically 1,400 parts per 330mm reel  
See page 194.11 for Tape & Reel details



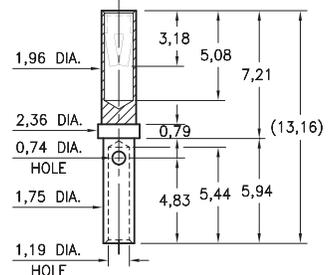
P.C.B. Layout



## 0720

0720-0-33-XX-34-XX-10-0

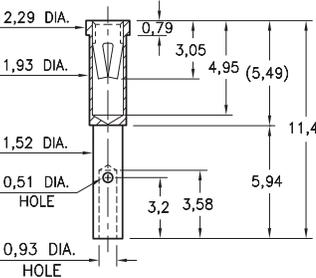
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



## 4130

4130-0-33-XX-34-XX-10-0

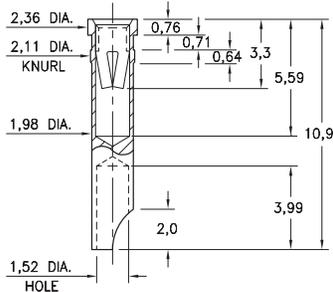
Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.



## 5084

5084-0-18-XX-34-XX-10-0

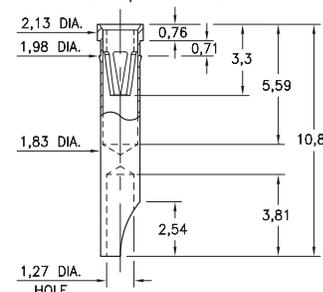
Press-fit in 2,06 mounting hole



## 0740

0740-0-18-XX-34-XX-10-0

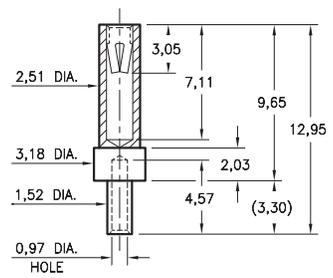
Press-fit in 1,91 mounting hole  
For wire sizes up to 20 AWG



## 8731

8731-0-19-XX-34-XX-10-0

Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: **XXXX - X - XX - XX - 34 - XX - XX - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

**#34** CONTACT (DATA ON PAGE 258)

(For alternate contact choices, see group E on page 248)



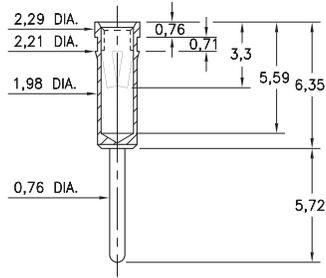
# PIN RECEPTACLES

FOR 0,81 - 1,17 DIAMETER PINS

## 8369

8369-0-15-XX-34-XX-04-0

Press-fit in 2,13 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - 0 - 15 - XX - 34 - XX - 10 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#34 CONTACT (DATA ON PAGE 258)**

(For alternate contact choices, see group E on page 248)

# LOOSE PINS & RECEPTACLES ON T&R

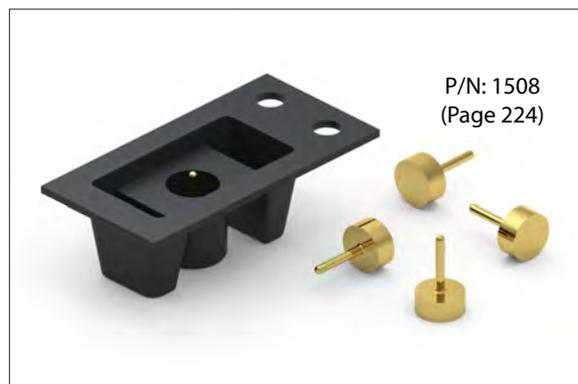
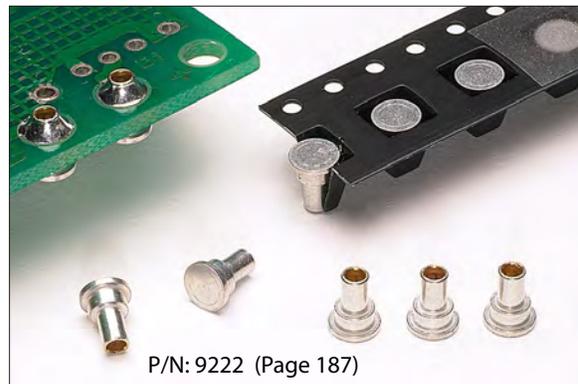
## LOOSE PINS & RECEPTACLES FOR AUTOMATED 'PICK & PLACE' ASSEMBLY

**Mill-Max offers receptacles (discrete sockets) on carrier tape per EIA-481 to feed automated 'pick & place' assembly equipment. Our standard reel size is 330mm.**

Two types of pins and receptacles are available on carrier tape: surface mount, flat types, which sit on the surface of the PCB where the pin or component lead plugs-in parallel to the PCB; and through-hole types where the lead plugs-in perpendicular to the PCB. Through-hole pins and receptacles are intrusive reflow soldered\*.

In addition, open bottom through-hole receptacles are available loaded with our Organic Fibre Plug® barrier which prevents solder paste or flux from contaminating the spring contact. After soldering, the OFP® barrier is pushed out of the receptacle when the device is plugged in.

\*Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The receptacles are placed into plated-through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated-through-holes and achieve solder joints as reliable as wave soldering. The OFP® barrier prevents solder paste from being picked up inside the contact during pick 'n place assembly. "Overprinting" paste on the solder mask can be used to adjust the volume of paste required to fill each hole.



# PIN RECEPTACLES

**FOR 1,02 - 1,27 DIAMETER PINS (#02 CONTACT)**  
**FOR 1,02 - 1,52 DIAMETER PINS (#03 CONTACT)**

<p><b>0355</b>  <b>0355-0-15-XX-02-XX-10-0</b>                  Solder mount in 2,59 min. mounting hole</p>	<p><b>0354</b>  <b>0354-0-15-XX-02-XX-10-0</b>                  Pentagonal press-fit in 2,64 min. plated through-hole</p>	<p><b>3490</b>  <b>3490-0-15-XX-02-XX-10-0</b>                  Press-fit in 2,31 mounting hole</p>	<p><b>3808</b>  <b>3808-0-15-XX-02-XX-10-0</b>                  Press-fit in 2,29 mounting hole</p>
<p><b>9184</b>  <b>9184-0-15-XX-02-XX-40-0</b>                  Bottom entry, surface mount                  2,34 min. plated through-hole                  Also available on carrier tape,                  See page 194.12 for Tape &amp; Reel details</p>	<p><b>9222</b>  <b>9222-2-15-XX-02-XX-40-0</b>                  Bottom entry, surface mount                  2,08 min. plated through-hole                  Also available on carrier tape,                  See page 194.12 for Tape &amp; Reel details</p>	<p><b>4064</b>  <b>4064-0-18-XX-03-XX-40-0</b>                  Surface mount                  Also available on 16mm wide carrier tape:                  2,400 parts per 330mm reel                  See page 194.13 for Tape &amp; Reel details</p>	

**SPECIFICATIONS:**

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths: ±0,13  
 Diameters: ±0,051  
 Angles: ±2°



**ORDER CODE:** XXXX - X - XX - XX - 02 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#02 or #03 CONTACT (DATA ON PAGE 259)**  
 (For alternate contact choices, see group F on page 248)



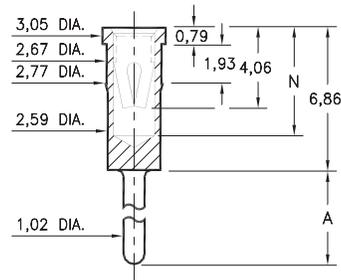
# PIN RECEPTACLES

**FOR 1,02 - 1,52 DIAMETER PINS (#03 CONTACT)**  
**FOR 1,5 - 1,6 DIAMETER PINS (#42 CONTACT)**

## 0433/8433

**X433-0-15-XX-03-XX-04-0**

Press-fit in 2,69 mounting hole

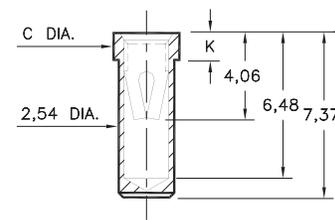


Basic Part Number	Length A	Depth N
<b>0433-0</b>	3,05	5,21
<b>8433-0</b>	8,0	5,84

## 0435/0436

**043X-0-15-XX-03-XX-10-0**

Solder mount in 2,59 min. mounting hole  
 Also available on 24mm wide carrier tape:  
 950 parts per 330mm reel  
 See page 194.13 for Tape & Reel details

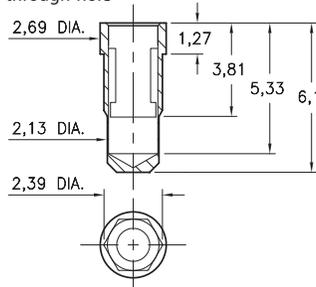


Basic Part Number	Dia. C	Length K
<b>0435-0</b>	3,0	1,27
<b>0436-0</b>	3,18	1,78

## 0342

**0342-0-15-XX-42-XX-10-0**

Hex press-fit in 2,29±0,05 plated through-hole

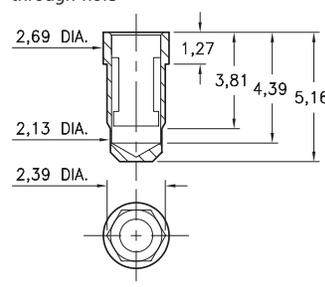


- 0342 receptacle uses Mill-Max's new #42 Contact. This receptacle will accept the Ø1,55 ±0,05 power pins of ¼ brick DC/DC converters.
- #42 contact can be ordered in standard receptacles that use #03 contact; or it can be specified as the spring element inside custom made receptacles.

## 6342

**6342-0-15-XX-42-XX-10-0**

Hex press-fit in 2,29±0,05 plated through-hole

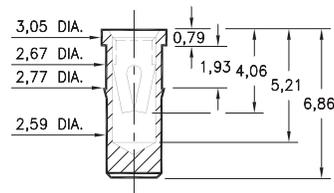


- 6342 receptacle uses Mill-Max's new #42 Contact. This receptacle will accept the Ø1,55 ±0,05 power pins of ¼ brick DC/DC converters.
- #42 contact can be ordered in standard receptacles that use #03 contact; or it can be specified as the spring element inside custom made receptacles.

## 0434

**0434-0-15-XX-03-XX-10-0**

Press-fit in 2,69 mounting hole



### Mechanical Data #42 Contact:

Insertion/Extraction Force with a Ø1,55 (nominal) pin:

First Cycle		2nd & Subsequent Cycles	
Insertion Force	Extraction Force	Insertion Force	Extraction Force
20N	6N	10N	6N

Compliance Test (the "spring back" characteristic of the contact to accept Ø 1,5 small pin after insertion of a Ø1,6 large pin) :

Initial Cycle with Ø1,5 pin		Second Cycle with Ø1,6 pin		Third Cycle with Ø1,5 pin	
Ins. Force	Ext. Force	Ins. Force	Ext. Force	Ins. Force	Ext. Force
18N	6N	22N	7N	3N	2N

(Insertion/Extraction Forces are in Newtons and measured with polished steel gage pins having elliptical shaped tips).

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#03 or #42 CONTACT (DATA ON PAGE 259)**



# PIN RECEPTACLES

**FOR 1,22 - 1,63 DIAMETER PINS (#13 CONTACT)**  
**FOR 1,14 - 1,65 DIAMETER PINS (#23 CONTACT)**

<p><b>0364</b>  <b>0364-0-15-XX-13-XX-10-0</b>            Solder mount in 2,54 min. mounting hole            Also available on 16mm wide carrier tape:            1,300 parts per 330mm reel            See page 194.13 for Tape &amp; Reel details</p>	<p><b>0363</b>  <b>0363-0-15-XX-23-XX-10-0</b>            Solder mount in 2,59 min. mounting hole</p>	<p><b>0365</b>  <b>0365-0-15-XX-23-XX-10-0</b>            Hex press-fit in 2,67 plated through-hole            Also available on 16mm wide carrier tape:            1,200 parts per 330mm reel            See page 194.14 for Tape &amp; Reel details</p>	<p><b>0366</b>  <b>0366-0-15-XX-13-XX-10-0</b>            Press-fit in 2,77 mounting hole</p>
<p><b>0372</b>  <b>0372-0-15-XX-13-XX-10-0</b>            Solder mount in 2,59 min. mounting hole            Also available on 24mm wide carrier tape:            950 parts per 330mm reel            See page 194.14 for Tape &amp; Reel details</p>	<p><b>0362</b>  <b>0362-0-15-XX-X3-XX-10-0</b>            Solder mount in 2,59 min. mounting hole</p>	<p><b>0367</b>  <b>0367-0-15-XX-23-XX-10-0</b>            Square press-fit in 1,02 plated through-hole</p>	<p><b>9324</b>  <b>9324-0-15-XX-23-XX-04-0</b>            Press-fit in 2,69 mounting hole</p>
<p><b>0492</b>  <b>0492-0-15-XX-13-XX-04-0</b>            Press-fit in 2,69 mounting hole</p>	<p><b>0381</b>  <b>0381-0-15-XX-23-XX-10-0</b>            Press-fit in 2,64 mounting hole</p>	<p><b>4034</b>  <b>4034-0-15-XX-23-XX-04-0</b>            Press-fit in 2,77 mounting hole</p>	<p><b>3044</b>  <b>3044-0-15-XX-23-XX-04-0</b>            Solder mount in 2,64 min. mounting hole</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

01 5,08µm TIN/LEAD OVER NICKEL

◆ 80 5,08µm TIN OVER NICKEL (RoHS)

◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#13 or #23 CONTACT (DATA ON PAGE 260)**

(For alternate contact choices, see group G on page 248)



# PIN RECEPTACLES

**FOR 1,22 - 1,63 DIAMETER PINS (#13 CONTACT)**  
**FOR 1,14 - 1,65 DIAMETER PINS (#23 CONTACT)**

<p><b>0496</b>  <b>0496-0-15-XX-23-XX-10-0</b>            Press-fit in 2,69 mounting hole</p>	<p><b>0368</b>  <b>0368-0-33-XX-13-XX-10-0</b>            Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.</p>	<p><b>8067</b>  <b>8067-0-19-XX-13-XX-10-0</b>            Wire Termination. Accepts wire sizes 24 AWG Max. / 28 AWG Min.</p>	<p><b>1105</b>  <b>1105-0-15-XX-13-XX-04-0</b>            Press-fit in 2,03 mounting hole</p>
<p><b>8730</b>  <b>8730-0-19-XX-23-XX-10-0</b>            Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.</p>	<p><b>3667</b>  <b>3667-0-19-XX-23-XX-10-0</b>            Wire crimp termination. Accepts wire sizes 18 AWG Max. / 22 AWG Min.</p>	<p><b>9372</b>  <b>9372-0-15-XX-23-XX-10-0</b>            Solder mount in 2,59 min. mounting hole</p>	<p><b>4582</b>  <b>4582-0-15-XX-23-XX-10-0</b>            Square press-fit in 1,02 plated through-hole</p>
<p><b>5834</b>  <b>5834-0-15-XX-23-XX-10-0</b>            Press-fit in 2,72 mounting hole</p>	<p><b>9401</b>  <b>9401-0-15-XX-23-XX-10-0</b>            Solder mount in 2,59 min. mounting hole            Also available on 24mm wide carrier tape:            1,100 parts per 330mm reel            See page 194.14 for Tape &amp; Reel details</p>	<p><b>9801</b>  <b>9801-0-15-XX-23-XX-10-0</b>            Solder mount in 2,59 min. mounting hole            Also available on 16mm wide carrier tape:            1,200 parts per 330mm reel            See page 194.14 for Tape &amp; Reel details</p>	<p><b>8829</b>  <b>8829-0-15-XX-23-XX-10-0</b>            Solder mount in 2,59 min. mounting hole            Also available on 24mm wide carrier tape:            950 parts per 330mm reel            See page 194.14 for Tape &amp; Reel details</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths:  $\pm 0,13$   
 Diameters:  $\pm 0,051$   
 Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#13 or #23 CONTACT (DATA ON PAGE 260)**

(For alternate contact choices, see group G on page 248)



# PIN RECEPTACLES

**FOR 1,22 - 1,63 DIAMETER PINS (#13 CONTACT)  
FOR 1,14 - 1,65 DIAMETER PINS (#23 CONTACT)**

<p><b>8365</b> <b>8365-0-15-XX-13-XX-10-0</b> Hex press-fit in 2,69 plated through-hole</p>	<p><b>8996</b> <b>8996-0-31-XX-13-XX-04-0</b> Compliant press-fit in 1,02 ±0,08 plated hole. For 1,52 → 2,54 thick board</p>	<p><b>9064</b> <b>9064-0-15-XX-13-XX-10-0</b> Solder mount in 2,59 min. mounting hole Also available on 16mm wide carrier tape: 1,300 parts per 330mm reel See page 194.14 for Tape &amp; Reel details</p>	<p><b>9280</b> <b>9280-0-15-XX-13-XX-10-0</b> Solder mount in 2,59 min. mounting hole</p>
<p><b>8347</b> <b>8347-0-15-XX-13-XX-10-0</b> Solder mount in 2,77 min. mounting hole</p>	<p><b>4900</b> <b>4900-0-19-XX-23-XX-10-0</b> Swage mount in 1,70 hole</p>	<p><b>0716</b> <b>0716-0-33-XX-23-XX-10-0</b> Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.</p>	<p><b>0760</b> <b>0760-0-18-XX-13-XX-10-0</b> Press-fit in 2,69 mounting hole For wire sizes up to 16 AWG</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#13 or #23 CONTACT (DATA ON PAGE 260)**

(For alternate contact choices, see group G on page 248)



# PIN RECEPTACLES

FOR 1,65 - 2,08 DIAMETER PINS

<p><b>0394</b> 0394-0-15-XX-07-XX-10-0 Solder mount in 3,05 min. mounting hole</p>	<p><b>0393</b> 0393-0-15-XX-07-XX-10-0 Solder mount in 3,66 min. mounting hole</p>	<p><b>0391</b> 0391-0-15-XX-07-XX-10-0 Solder mount in 4,04 min. mounting hole</p>	<p><b>9016</b> 9016-0-15-XX-07-XX-10-0 Press-fit in 3,33 mounting hole</p>
<p><b>0493</b> 0493-0-15-XX-07-XX-10-0 Press-fit in 3,66 mounting hole</p>	<p><b>0490</b> 0490-0-15-XX-07-XX-04-0 Press-fit in 3,66 mounting hole</p>	<p><b>0616</b> 0616-0-18-XX-07-XX-10-0 Press-fit in 3,66 mounting hole Accepts wire sizes up to 0,89 dia.</p>	<p><b>0387</b> 0387-0-15-XX-07-XX-04-0 Solder mount in 1,60 min. mounting hole</p>
<p><b>0370</b> 0370-0-19-XX-07-XX-10-0 Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.</p>	<p><b>4040</b> 4040-0-19-XX-07-XX-10-0 Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.</p>	<p><b>0491</b> 0491-0-19-XX-07-XX-04-0 For horizontal wire termination</p>	<p><b>9214</b> 9214-0-15-XX-07-XX-10-0 Solder mount in 2,11 min. mounting hole</p>

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - 1X - XX - 07 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#07 CONTACT (DATA ON PAGE 261)**

(For alternate contact choices, see group H on page 248)



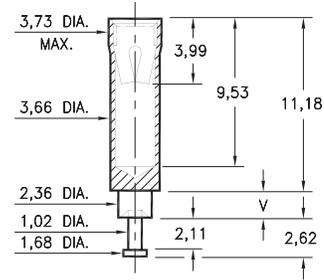
# PIN RECEPTACLES

FOR 1,65 - 2,08 DIAMETER PINS

## 0395

0395-X-15-XX-07-XX-10-0

Swage mount in 2,44 hole

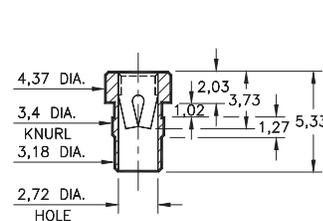


Basic Part Number	Board Thickness	Length V
0395-1	0,79	1,57
0395-2	1,57	2,39
0395-3	2,39	3,18
0395-4	3,18	3,96
0395-5	4,78	5,56

## 8016

8016-0-15-XX-07-XX-10-0

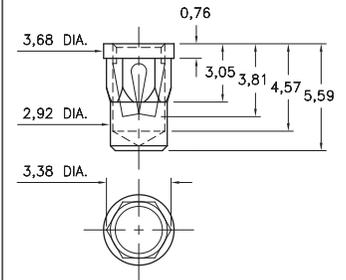
Press-fit in 3,33 mounting hole



## 0350

0350-0-15-XX-07-XX-10-0

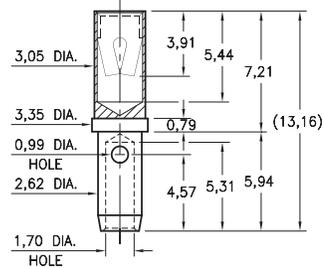
Hex press-fit in 3,28±0,05 plated through-hole



## 0714

0714-0-33-XX-07-XX-10-0

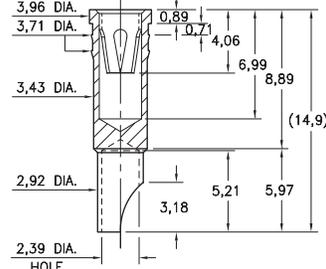
Wire crimp termination. Accepts wire sizes 14 AWG Max. / 16 AWG Min.



## 0778

0778-0-18-XX-07-XX-10-0

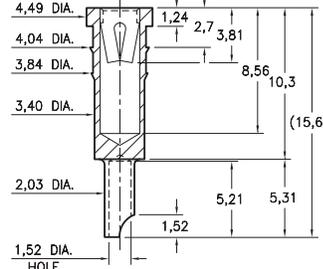
Press-fit in 3,63 mounting hole. Accepts wire sizes up to 14 AWG



## 9177

9177-0-18-XX-07-XX-10-0

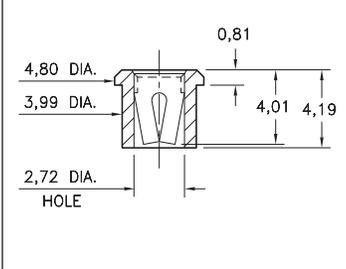
Press-fit in 3,84 mounting hole. Accepts wire sizes up to 16 AWG



## 5391

5391-0-15-XX-07-XX-10-0

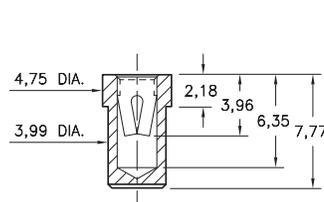
Solder mount in 4,04 min. mounting hole



## 8837

8837-0-15-XX-14-XX-10-0

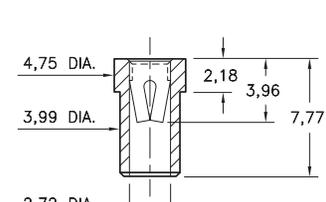
Solder mount in 4,04 min. mounting hole



## 9837

9837-0-15-XX-14-XX-10-0

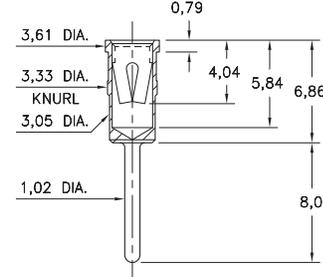
Solder mount in 4,04 min. mounting hole



## 8994

8994-0-15-XX-07-XX-04-0

Press-fit in 3,25 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ±0,13  
 Diameters: ±0,051  
 Angles: ±2°



ORDER CODE: **XXXX - X - XX - XX - XX - 10 - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#07 or #14 CONTACT (DATA ON PAGE 261)

(For alternate contact choices, see group H on page 248)



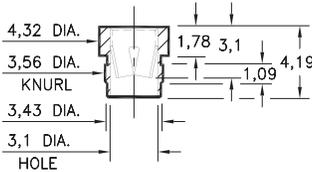
# PIN RECEPTACLES

FOR 2,13 - 2,59 DIAMETER PINS

## 0388

0388-0-15-XX-08-XX-10-0

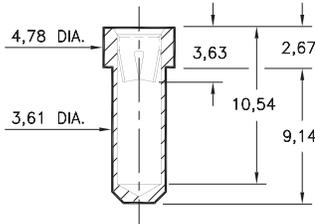
Press-fit in 3,51 mounting hole



## 0390

0390-0-15-XX-08-XX-10-0

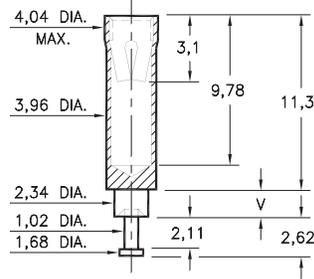
Solder mount in 3,66 min. mounting hole



## 0389

0389-X-15-XX-08-XX-10-0

Swage mount in 2,39 hole

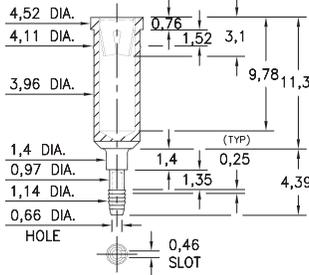


Basic Part Number	Board Thickness	Length V
0389-2	1,57	2,39
0389-3	2,39	3,18
0389-4	3,18	3,96

## 8963

8963-0-31-XX-08-XX-04-0

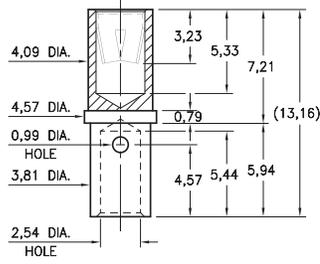
Compliant press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board



## 0712

0712-0-33-XX-08-XX-10-0

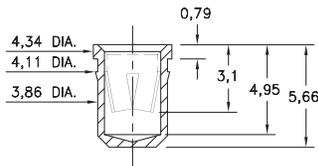
Wire crimp termination. Accepts wire sizes 12 AWG Max. / 14 AWG Min.



## 5493

5493-0-15-XX-08-XX-10-0

Press-fit in 4,01 mounting hole



### SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Millimeters

Tolerances On: Lengths: ± 0,13  
 Diameters: ± 0,051  
 Angles: ± 2°



ORDER CODE: XXXX - X - XX - XX - 08 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#08 CONTACT (DATA ON PAGE 262)



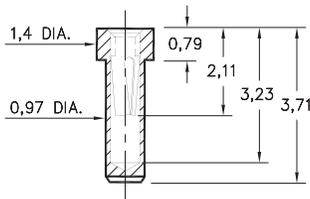
# PIN RECEPTACLES

**FOR 0,38 - 0,51 DIAMETER PINS (#11 CONTACT)  
FOR 0,38 - 0,56 DIAMETER PINS (#21 CONTACT)  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 1407

**1407-0-15-XX-11-XX-10-0**

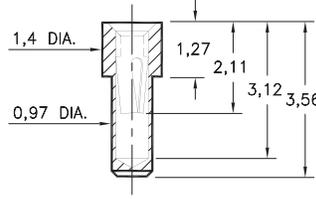
Solder mount in 1,02 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel  
Order as: 1407-0-57-XX-11-XX-10-0



## 0569

**0569-0-15-XX-X1-XX-10-0**

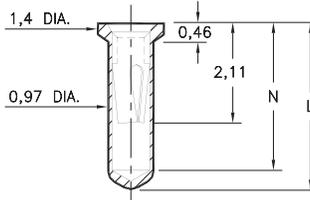
Solder mount in 1,02 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
Order as: 0569-0-57-XX-X1-XX-10-0



## 0552

**0552-X-15-XX-X1-XX-10-0**

Solder mount in 1,02 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel  
Order as: 0552-X-57-XX-X1-XX-10-0

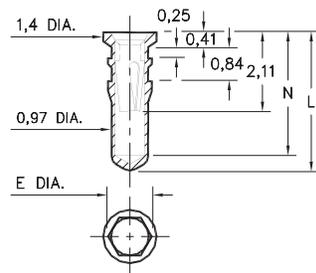


Basic Part Number	Length L	Depth N
<b>0552-1</b>	3,45	3,05
<b>0552-2</b>	4,32	3,81

## 0553

**0553-X-15-XX-X1-XX-10-0**

Also available on 16mm wide carrier tape:  
1,580 parts per 330mm reel  
Order as: 0553-2-57-XX-11-XX-10-0

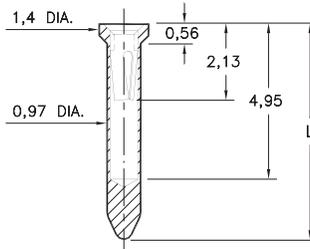


Basic Part Number	Hex Dia. E	Length L	Depth N
<b>0553-1</b>	1,12	3,56	3,15
<b>0553-2</b>	1,12	4,32	3,91
<b>0553-3</b>	1,12	7,16	6,76

## 8579

**8579-X-15-XX-X1-XX-10-0**

Solder mount in 1,02 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,200 parts per 330mm reel  
Order as: 8579-0-57-XX-X1-XX-10-0



Basic Part Number	Length L
<b>8579-0</b>	5,94
<b>8579-1</b>	7,49

### T&R Packaging

Basic Part Number	Tape Width	Parts per 330mm Reel
<b>8579-0</b>	24mm	1,200
<b>8579-1</b>	24mm	1,000

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- 80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- 15** 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02** 2,54 $\mu$ m TIN/LEAD OVER NICKEL
- 84** 2,54 $\mu$ m TIN OVER NICKEL (RoHS)
- 27** 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#11 or #21 CONTACT (DATA ON PAGE 251)**

(For alternate contact choices, see group A on page 248)

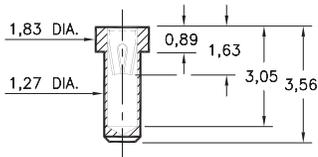
# PIN RECEPTACLES

**FOR 0,38 - 0,56 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0550 \*

**0550-0-15-XX-22-XX-10-0**

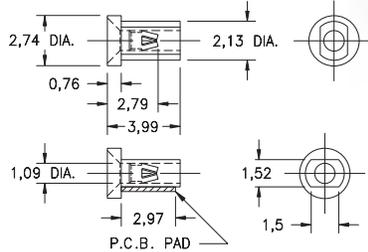
Solder mount in 1,32 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
Order as: 0550-0-57-XX-22-XX-10-0



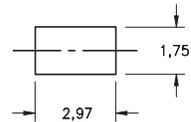
## 5739

**5739-0-18-XX-12-XX-10-0**

Surface mount  
Also available on 16mm wide carrier tape:  
3,000 parts per 330mm reel  
Order as: 5739-0-58-XX-12-XX-10-0



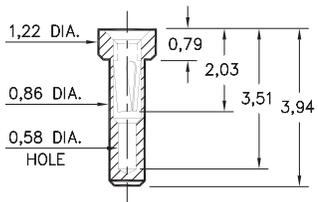
P.C.B. Layout



## 3016

**3016-0-15-XX-21-XX-10-0**

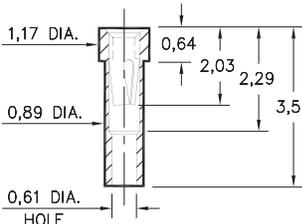
Solder mount in 0,91 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,900 parts per 330mm reel  
Order as: 3016-0-57-XX-21-XX-10-0



## 8637

**8637-0-15-XX-21-XX-10-0**

Solder mount in 0,94 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
Order as: 8637-0-57-XX-21-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#12, #21 or #22 CONTACT (DATA ON PAGE 252)**

(Contact may be interchanged with group A, B & C contact on page 248)

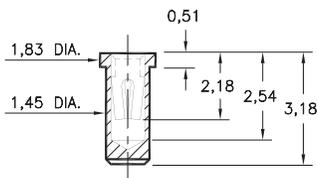
# PIN RECEPTACLES

**FOR 0,38 - 0,64 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0669

**0669-0-15-XX-30-XX-10-0**

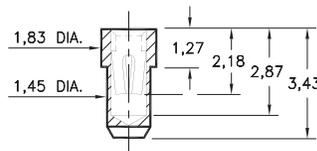
Solder mount in 1,52 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
Order as: 0669-0-57-XX-30-XX-10-0



## 0670

**0670-0-15-XX-30-XX-10-0**

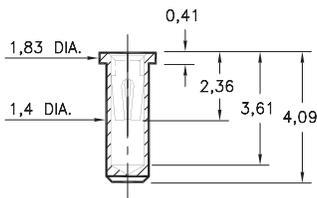
Solder mount in 1,52 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
Order as: 0670-0-57-XX-30-XX-10-0



## 0667

**0667-0-15-XX-30-XX-10-0**

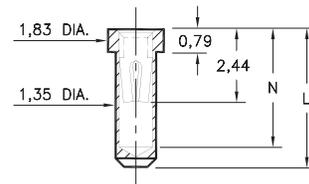
Solder mount in 1,45 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
Order as: 0667-0-57-XX-30-XX-10-0



## 1401/3185

**XXXX-0-15-XX-30-XX-10-0**

Solder mount in 1,4 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
Order as: XXXX-0-57-XX-30-XX-10-0

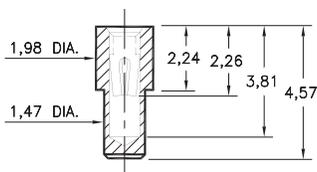


Basic Part Number	Length L	Depth N
1401-0	4,19	3,68
3185-0	3,30	2,77

## 0665

**0665-0-15-XX-30-XX-10-0**

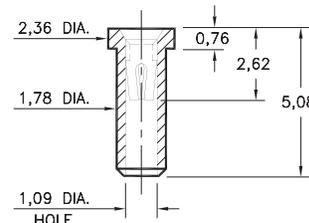
Solder mount in 1,55 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,580 parts per 330mm reel  
Order as: 0665-0-57-XX-30-XX-10-0



## 0341

**0341-0-15-XX-30-XX-10-0**

Solder mount in 1,85 mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
Order as: 0341-0-57-XX-30-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths: ±0,13

Diameters: ±0,051

Angles: ±2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30 CONTACT (DATA ON PAGE 253)**

(For alternate contact choices, see group B & C on page 248)

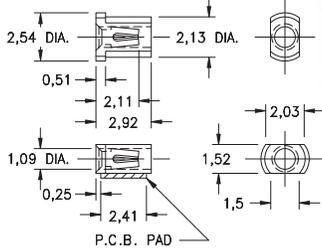
# PIN RECEPTACLES

**FOR 0,38 - 0,64 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

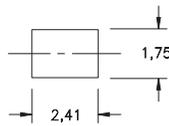
## 3907

**3907-0-18-XX-30-XX-10-0**

Surface mount  
Also available on 12mm wide carrier tape:  
4,000 parts per 330mm reel  
Order as: 3907-0-58-XX-30-XX-10-0



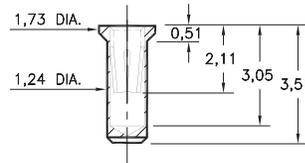
P.C.B. Layout



## 0680

**0680-0-15-XX-32-XX-10-0**

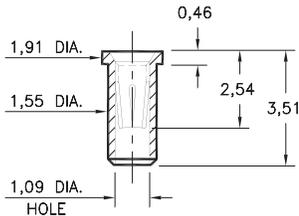
Solder mount in 1,3 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
Order as: 0680-0-57-XX-32-XX-10-0



## 0666

**0666-0-15-XX-32-XX-10-0**

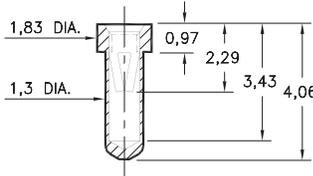
Solder mount in 1,63 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,000 parts per 330mm reel  
Order as: 0666-0-57-XX-32-XX-10-0



## 0555

**0555-0-15-XX-32-XX-10-0**

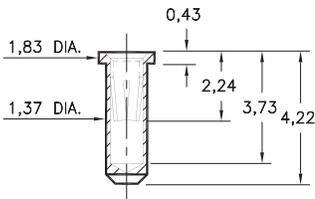
Solder mount in 1,35 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,800 parts per 330mm reel  
Order as: 0555-0-57-XX-32-XX-10-0



## 0682

**0682-0-15-XX-32-XX-10-0**

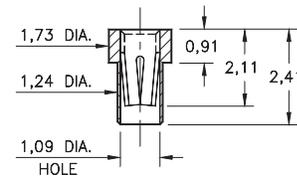
Solder mount in 1,42 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel  
Order as: 0682-0-57-XX-32-XX-10-0



## 5342

**5342-0-15-XX-35-XX-10-0**

Solder mount in 1,3 min. mounting hole  
Also available on 8mm wide carrier tape:  
6,000 parts per 330mm reel  
Order as: 5342-0-57-XX-35-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 84 2,54 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30, #32 or #35 CONTACT (DATA ON PAGE 253 & 254)**  
(For alternate contact choices, see group B & C on page 248)

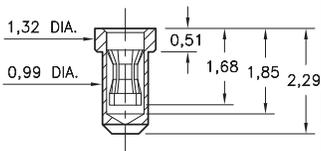
# PIN RECEPTACLES

**FOR 0,46 - 0,58 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0507

**0507-0-15-XX-31-XX-10-0**

Solder mount in 1,07 min. mounting hole  
Also available on 16mm wide carrier tape:  
3,000 parts per 330mm reel  
Order as: 0507-0-57-XX-31-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions: Inches**

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

**01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ **80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ **15** 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

**01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ **80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ **27** 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#31** CONTACT

(For alternate contact choices, see group A on page 248)

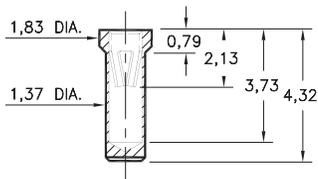
# PIN RECEPTACLES

**FOR 0,51 - 0,81 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0338

**0338-0-15-XX-15-XX-10-0**

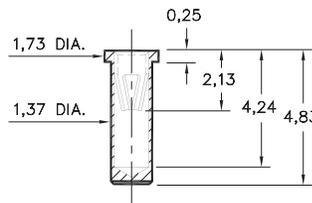
Solder mount in 1,45 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel  
Order as: 0338-0-57-XX-15-XX-10-0



## 0339

**0339-0-15-XX-15-XX-10-0**

Solder mount in 1,45 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,540 parts per 330mm reel  
Order as: 0339-0-57-XX-15-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#15 CONTACT (DATA ON PAGE 254)**

(For alternate contact choices, see group K on page 248)

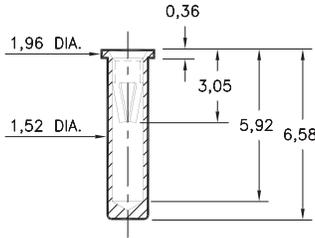
# PIN RECEPTACLES

**FOR 0,56 - 0,81 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0295

**0295-0-15-XX-06-XX-10-0**

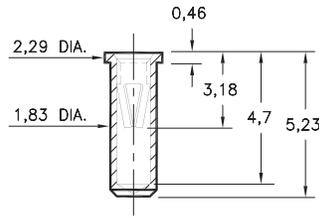
Solder mount in 1,60 min. mounting hole  
Also available on 12mm wide carrier tape:  
1,000 parts per 330mm reel  
Order as: 0295-0-57-XX-06-XX-10-0



## 0294

**0294-0-15-XX-06-XX-10-0**

Solder mount in 1,93 min. mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
Order as: 0294-0-57-XX-06-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

**01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ **80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ **15** 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

**01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ **80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ **27** 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#06 CONTACT (DATA ON PAGE 255)**

(For alternate contact choices, see group D on page 248)

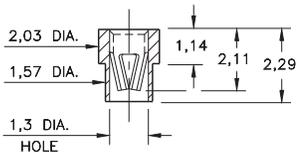
# PIN RECEPTACLES

**FOR 0,56 - 0,86 DIAMETER PINS AND 0,64 SQUARE PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0287

**0287-0-15-XX-16-XX-10-0**

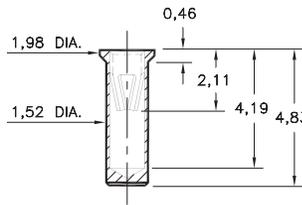
Solder mount in 1,65 min. mounting hole  
Also available on 8mm wide carrier tape:  
3,250 parts per 330mm reel  
Order as: 0287-0-57-XX-16-XX-10-0



## 0415

**0415-0-15-XX-16-XX-10-0**

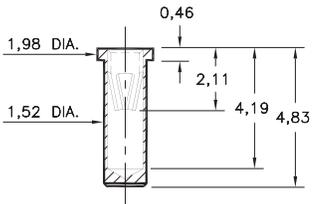
Solder mount in 1,6 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,500 parts per 330mm reel  
Order as: 0415-0-57-XX-16-XX-10-0



## 6021

**6021-0-15-XX-16-XX-10-0**

Solder mount in 1,57 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,500 parts per 330mm reel  
Order as: 6021-0-57-XX-16-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#16 CONTACT (DATA ON PAGE 256)**

(For alternate contact choices, see group D on page 248)

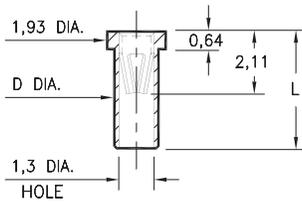
# PIN RECEPTACLES

**FOR 0,64 - 0,94 DIAMETER PINS AND 0,64 SQUARE PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0305

### 0305-X-15-XX-47-XX-10-0

Solder mount in 1,5 / 1,55 mounting hole  
Also available on 8mm or 24mm wide carrier tape: See chart for details  
Order as: 0305-X-57-XX-47-XX-10-0



Basic Part Number	Length L	Dia. D
0305-0	2,41	1,42
0305-1	2,67	1,47
0305-2	3,94	1,47

### T&R Packaging

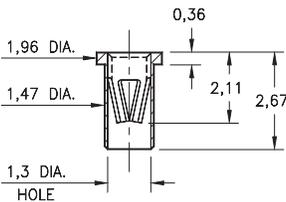
Basic Part Number	Tape Width	Parts per 330mm Reel
0305-0	8mm	6,000
0305-1	8mm	6,000
0305-2	24mm	1,500



## 7305

### 7305-0-15-XX-47-XX-10-0

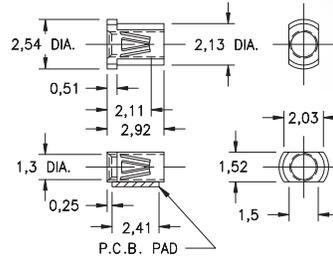
Solder mount in 1,52 min. mounting hole  
Also available on 8mm wide carrier tape: 6,000 parts per 330mm reel  
Order as: 7305-0-57-XX-47-XX-10-0



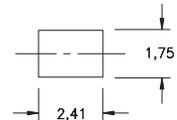
## 8806

### 8806-0-18-XX-47-XX-40-0

Surface mount  
Also available on 12mm wide carrier tape: 4,000 parts per 330mm reel  
Order as: 8806-0-58-XX-47-XX-10-0



### P.C.B. Layout



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - XX - 0

**BASIC PART #** →

**SPECIFY SHELL FINISH:** →

01 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:** →

01 5,08 $\mu$ m TIN/LEAD OVER NICKEL

◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

#47 CONTACT (DATA ON PAGE 256)

(For alternate contact choices, see group D on page 248)

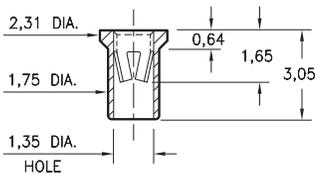
# PIN RECEPTACLES

**FOR 0,94 - 1,09 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 7406

**7406-0-15-XX-18-XX-10-0**

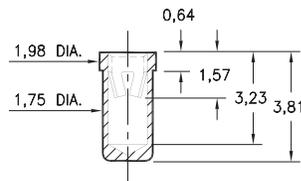
Solder mount in 1,80 min. mounting hole  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel  
Order as: 7406-0-57-XX-18-XX-10-0



## 8331

**8331-0-15-XX-18-XX-10-0**

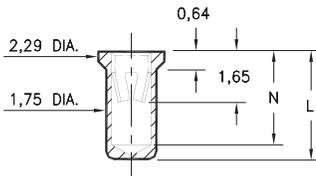
Solder mount in 1,80 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,900 parts per 330mm reel  
Order as: 8331-0-57-XX-18-XX-10-0



## 0331/9353

**X3XX-0-15-XX-18-XX-10-0**

Solder mount in 1,80 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,000 parts per 330mm reel  
Order as: X3XX-0-57-XX-18-XX-10-0

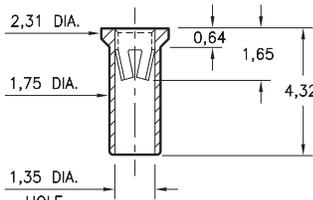


Basic Part Number	Length L	Depth N
<b>0331-0</b>	3,81	3,23
<b>9353-0</b>	4,32	3,73

## 9354

**9354-0-15-XX-18-XX-10-0**

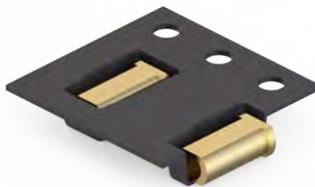
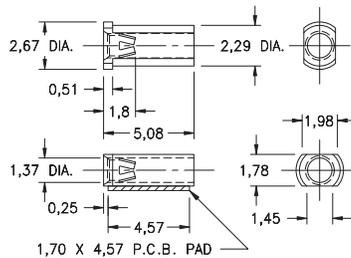
Solder mount in 1,80 min. mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
Order as: 9354-0-57-XX-18-XX-10-0



## 6628

**6628-0-18-XX-18-XX-10-0**

Surface mount  
Also available on 12mm wide carrier tape:  
3,700 parts per 330mm reel  
Order as: 6628-0-58-XX-18-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#18 CONTACT (DATA ON PAGE 257)**

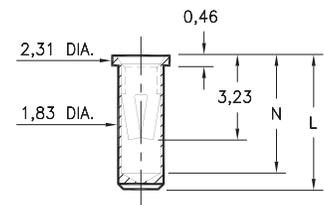
(For alternate contact choices, see group L on page 248)

# PIN RECEPTACLES

**FOR 0,81 - 1,17 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 0327/0351/0373

**03XX-0-15-XX-34-XX-10-0**  
Solder mount in 1,91 min. mounting hole  
Also available on 12mm or 24mm wide carrier tape:  
See chart for details  
Order as: 03XX-0-57-XX-34-XX-10-0



Basic Part Number	Length L	Depth N
<b>0327-0</b>	5,23	4,57
<b>0351-0</b>	5,74	5,08
<b>0373-0</b>	6,86	6,12

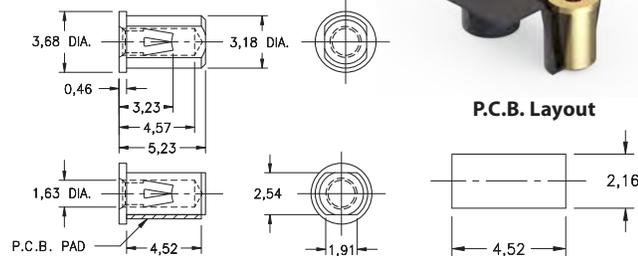
### T&R Packaging

Basic Part Number	Tape Width	Parts per 13" Reel
<b>0327-0</b>	12mm	1,400
<b>0351-0</b>	24mm	1,100
<b>0373-0</b>	24mm	1,000



## 8206

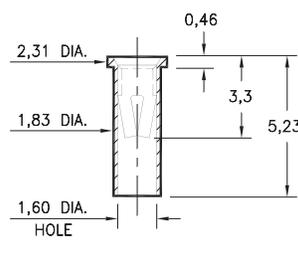
**8206-0-15-XX-34-XX-40-0**  
Surface mount, board edge  
Also available on 16mm wide carrier tape:  
Packaged Vertically 1,400 parts per 330mm reel  
Order as: 8206-0-57-XX-34-XX-40-0



### P.C.B. Layout

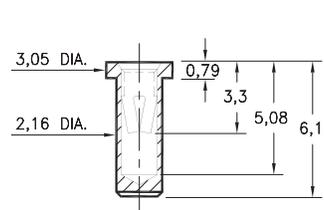
## 0312

**0312-0-15-XX-34-XX-10-0**  
Solder mount in 1,91 min. mounting hole  
Also available on 12mm wide carrier tape:  
1,400 parts per 330mm reel  
Order as: 0312-0-57-XX-34-XX-10-0



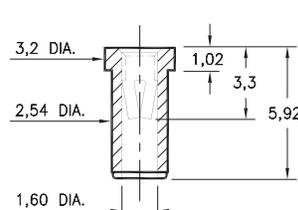
## 0340

**0340-0-15-XX-34-XX-10-0**  
Solder mount in 2,21 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,250 parts per 330mm reel  
Order as: 0340-0-57-XX-34-XX-10-0



## 0356

**0356-0-15-XX-34-XX-10-0**  
Solder mount in 2,59 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,100 parts per 330mm reel  
Order as: 0356-0-57-XX-34-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions: Inches**  
**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#34 CONTACT (DATA ON PAGE 258)**

(For alternate contact choices, see group E on page 248)

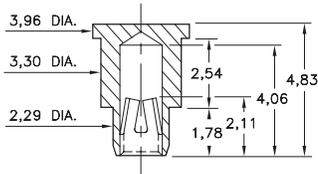
# PIN RECEPTACLES

FOR 1,02 - 1,27 DIAMETER PINS  
RECEPTACLES ON TAPE & REEL PACKAGING

## 9184

9184-0-15-XX-02-XX-40-0

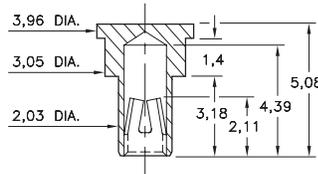
Bottom entry, surface mount  
2,34 min. plated through-hole  
Also available on carrier tape,  
Order as: 9184-0-57-XX-02-XX-40-0



## 9222

9222-2-15-XX-02-XX-40-0

Bottom entry, surface mount  
2,08 min. plated through-hole  
Also available on carrier tape,  
Order as: 9222-2-57-XX-02-XX-40-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

#02 CONTACT (DATA ON PAGE 259)

(For alternate contact choices, see group F on page 248)

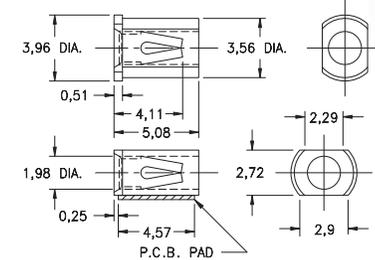
# PIN RECEPTACLES

**FOR 1,02 - 1,52 DIAMETER PINS (#03 CONTACT)  
FOR 1,22 - 1,63 DIAMETER PINS (#13 CONTACT)  
RECEPTACLES ON TAPE & REEL PACKAGING**

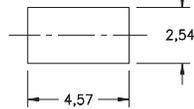
## 4064

**4064-0-18-XX-03-XX-40-0**

Surface mount  
Also available on 16mm wide carrier tape:  
2,400 parts per 330mm reel  
Order as: 4064-0-58-XX-03-XX-40-0



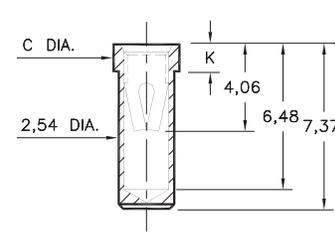
P.C.B. Layout



## 0435/0436

**043X-0-15-XX-03-XX-10-0**

Solder mount in 2,59 min. mounting hole  
Also available on 24mm wide carrier tape:  
950 parts per 330mm reel  
Order as: 0435-0-57-XX-03-XX-10-0

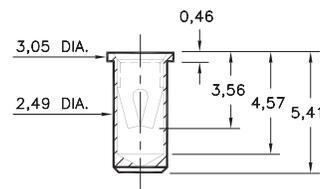


Basic Part Number	Dia. C	Length K
<b>0435-0</b>	3,0	1,27
<b>0436-0</b>	3,18	1,78

## 0364

**0364-0-15-XX-13-XX-10-0**

Solder mount in 2,54 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,300 parts per 330mm reel  
Order as: 0364-0-57-XX-13-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$

Diameters:  $\pm 0,051$

Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#03 or #13 CONTACT (DATA ON PAGE 259 - 260)**

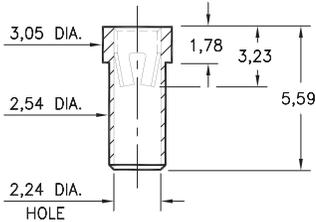
# PIN RECEPTACLES

**FOR 1,22 - 1,63 DIAMETER PINS (#13 CONTACT)  
FOR 1,14 - 1,65 DIAMETER PINS (#23 CONTACT)  
RECEPTACLES ON TAPE & REEL PACKAGING**

## 9064

**9064-0-15-XX-13-XX-10-0**

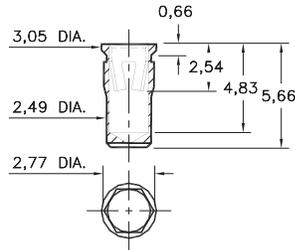
Solder mount in 2,59 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,300 parts per 330mm reel  
Order as: 9064-0-57-XX-13-XX-10-0



## 0365

**0365-0-15-XX-23-XX-10-0**

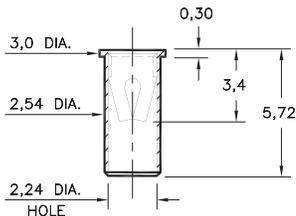
Hex press-fit in 2,67 plated through-hole  
Also available on 16mm wide carrier tape:  
1,200 parts per 330mm reel  
Order as: 0365-0-57-XX-23-XX-10-0



## 0372

**0372-0-15-XX-13-XX-10-0**

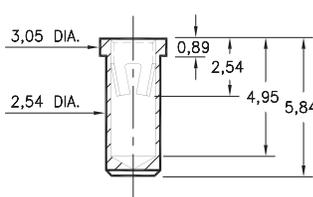
Solder mount in 2,59 min. mounting hole  
Also available on 24mm wide carrier tape:  
950 parts per 330mm reel  
Order as: 0372-0-57-XX-13-XX-10-0



## 9401

**9401-0-15-XX-23-XX-10-0**

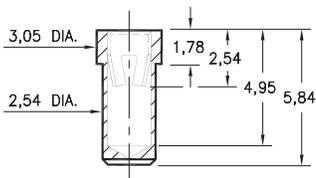
Solder mount in 2,59 min. mounting hole  
Also available on 24mm wide carrier tape:  
1,100 parts per 330mm reel  
Order as: 9401-0-57-XX-23-XX-10-0



## 9801

**9801-0-15-XX-23-XX-10-0**

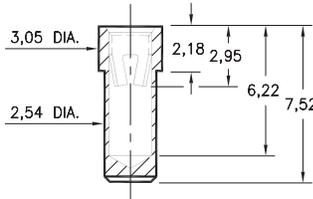
Solder mount in 2,59 min. mounting hole  
Also available on 16mm wide carrier tape:  
1,200 parts per 330mm reel  
Order as: 9801-0-57-XX-23-XX-10-0



## 8829

**8829-0-15-XX-23-XX-10-0**

Solder mount in 2,59 min. mounting hole  
Also available on 24mm wide carrier tape:  
950 parts per 330mm reel  
Order as: 8829-0-57-XX-23-XX-10-0



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#13 or #23 CONTACT (DATA ON PAGE 260)**

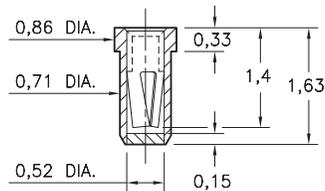
(For alternate contact choices, see group G on page 248)

# PIN RECEPTACLES

## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 250, 251 & 253)

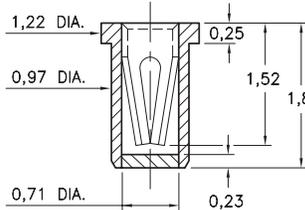
### 4428

**4428-0-XX-XX-04-XX-10-0**  
Solder mount in  $\varnothing 0,81$  max. PTH  
#04 Contact for  $\varnothing 0,20 - 0,33$  pins  
Also available on 16mm wide carrier tape:  
3,400 parts per 330mm reel



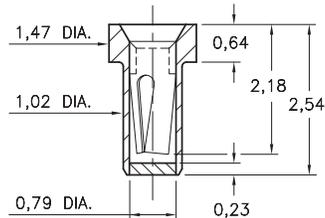
### 5359

**5359-0-XX-XX-10-XX-10-0**  
Solder mount in  $\varnothing 1,09 \pm 0,08$  PTH  
#10 Contact for  $\varnothing 0,30 - 0,43$  pins  
Also available on 16mm wide carrier tape:  
3,000 parts per 330mm reel



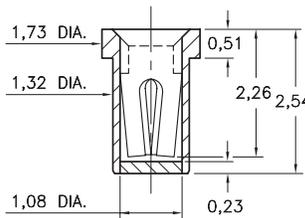
### 0577

**0577-0-XX-XX-21-XX-10-0**  
Solder mount in  $\varnothing 1,14 \pm 0,08$  PTH  
#21 Contact for  $\varnothing 0,38 - 0,56$  pins  
Also available on 12mm wide carrier tape:  
3,000 parts per 330mm reel



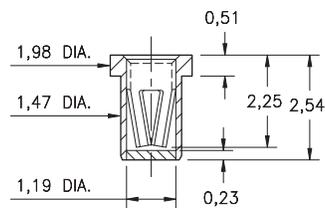
### 4015

**4015-0-XX-XX-30-XX-10-0**  
Solder mount in  $\varnothing 1,45 \pm 0,08$  PTH  
#30 Contact for  $\varnothing 0,38 - 0,64$  pins  
Also available on 8mm wide carrier tape:  
5,500 parts per 330mm reel



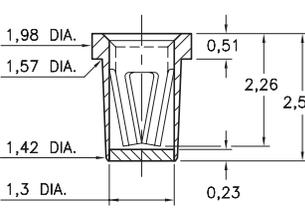
### 0337

**0337-0-XX-XX-15-XX-10-0**  
Solder mount in  $\varnothing 1,68 \pm 0,08$  PTH  
#15 Contact for  $\varnothing 0,51 - 0,81$  pins  
Also available on 8mm wide carrier tape:  
6,000 parts per 330mm reel



### 4280

**4280-0-XX-XX-16-XX-10-0**  
Solder mount in  $\varnothing 1,7 \pm 0,08$  PTH  
#16 Contact for  $\varnothing 0,56 - 0,86$  pins  
Also available on 8mm wide carrier tape:  
6,000 parts per 330mm reel



#### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - 0 - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY PACKAGING:**

- 43 Discrete Receptacles
- 67 Supplied on 330mm Reels

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)
- 02 2,54 $\mu$ m TIN/LEAD OVER NICKEL
- 84 2,54 $\mu$ m TIN OVER NICKEL (RoHS)

**CONTACT:**

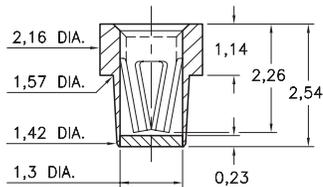
#04, #10, #15, #16, #21 or #30 CONTACT (DATA ON PAGES 250, 251 & 253)

# PIN RECEPTACLES

## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 254 - 262)

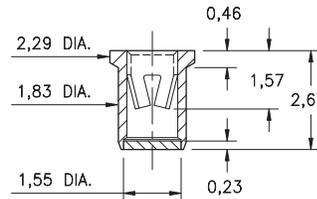
### 5280

**5280-0-XX-XX-16-XX-40-0**  
Solder mount in  $\varnothing 1,7 \pm 0,08$  PTH  
#16 Contact for  $\varnothing 0,56 - 0,86$  pins  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel



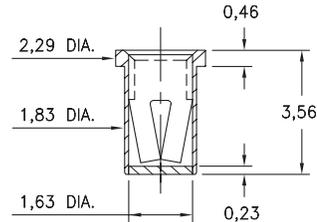
### 0332

**0332-0-XX-XX-18-XX-10-0**  
Solder mount in  $\varnothing 2,01 \pm 0,08$  PTH  
#18 Contact for  $\varnothing 0,94 - 1,09$  pins  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel



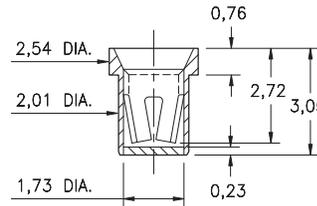
### 0479

**0479-0-XX-XX-34-XX-10-0**  
Solder mount in  $\varnothing 1,96 \pm 0,08$  PTH  
#34 Contact for  $\varnothing 0,81 - 1,17$  pins  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel



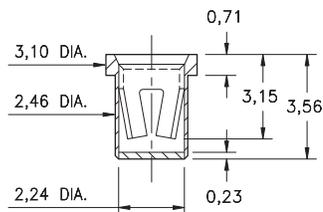
### 0375

**0375-0-XX-XX-02-XX-10-0**  
Solder mount in  $\varnothing 2,21 \pm 0,08$  PTH  
#02 Contact for  $\varnothing 1,02 - 1,27$  pins  
Also available on 12mm wide carrier tape:  
4,500 parts per 330mm reel



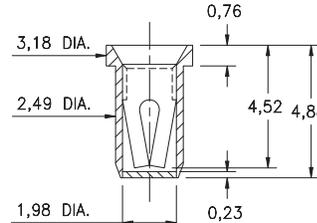
### 0384

**0384-0-XX-XX-23-XX-10-0**  
Solder mount in  $\varnothing 2,67 \pm 0,08$  PTH  
#23 Contact for  $\varnothing 1,14 - 1,65$  pins  
Also available on 12mm wide carrier tape:  
2,000 parts per 330mm reel



### 0353

**0353-0-XX-XX-03-XX-10-0**  
Solder mount in  $\varnothing 2,69 \pm 0,08$  PTH  
#03 Contact for  $\varnothing 1,02 - 1,52$  pins  
Also available on 12mm wide carrier tape:  
1,300 parts per 330mm reel



#### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions: Millimeters**  
**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - 0 - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY PACKAGING:**

- 43 Discrete Receptacles
- 67 Supplied on 330mm Reels

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- 80 5,08µm TIN OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 27 0,76µm GOLD OVER NICKEL (RoHS)
- 02 2,54µm TIN/LEAD OVER NICKEL
- 80 5,08µm TIN OVER NICKEL (RoHS)

**CONTACT:**

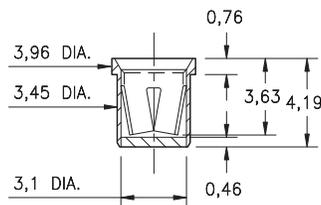
#02, #03, #16, #18, #23, or #34 CONTACT (DATA ON PAGES 254 - 262)

# PIN RECEPTACLES

## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 256 - 262)

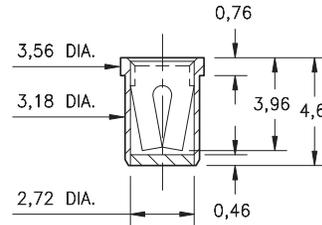
### 0321

**0321-0-XX-XX-08-XX-10-0**  
Solder mount in  $\varnothing 3,66 \pm 0,08$  PTH  
#08 Contact for  $\varnothing 2,13 - 2,59$  pins  
Also available on 16mm wide carrier tape:  
1,700 parts per 330mm reel



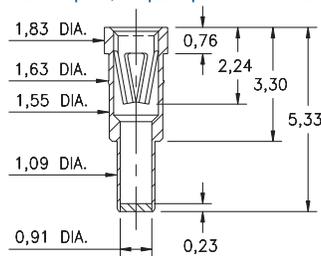
### 0376

**0376-0-XX-XX-07-XX-10-0**  
Solder mount in  $\varnothing 3,38 \pm 0,08$  PTH  
#07 Contact for  $\varnothing 1,65'' - 2,08$  pins  
Also available on 16mm wide carrier tape:  
1,500 parts per 330mm reel



### 3435

**3435-0-XX-XX-47-XX-04-0**  
Solder mount in  $\varnothing 1,17 \pm 0,08$  PTH  
#47 Contact for  $\varnothing 0,64 - 0,94$  and  $0,64$  square pins. Also available on 24mm wide carrier tape: 1,400 parts per 330mm reel



#### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - 0 - XX - XX - XX - XX - XX - 0

**BASIC PART #**

**SPECIFY PACKAGING:**

**43** Discrete Receptacles

**67** Supplied on 330mm Reels

**SPECIFY SHELL FINISH:**

**01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL

**80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

**CONTACT:**

**SPECIFY CONTACT FINISH:**

**27** 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**02** 2,54 $\mu$ m TIN/LEAD OVER NICKEL

**84** 2,54 $\mu$ m TIN OVER NICKEL (RoHS)

**#07, #08 or #47 CONTACT (DATA ON PAGES 256-262)**

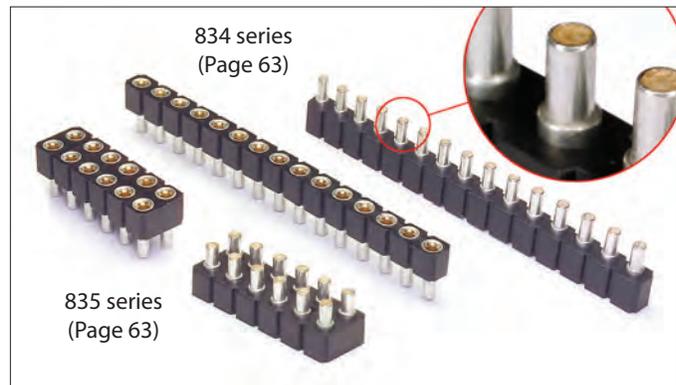
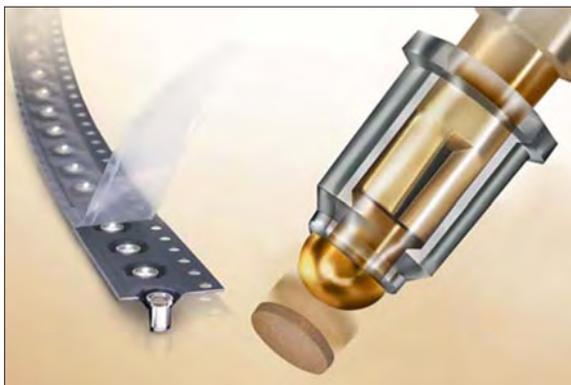
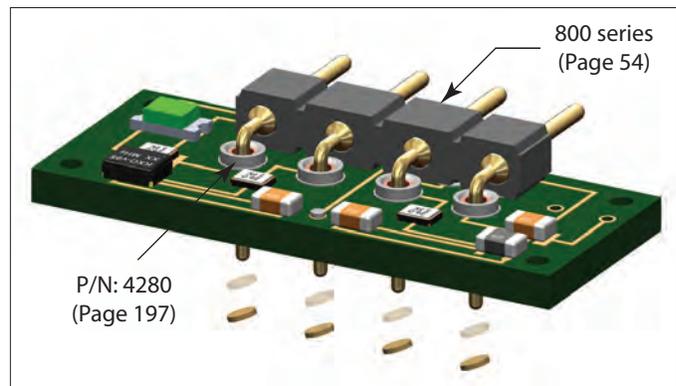
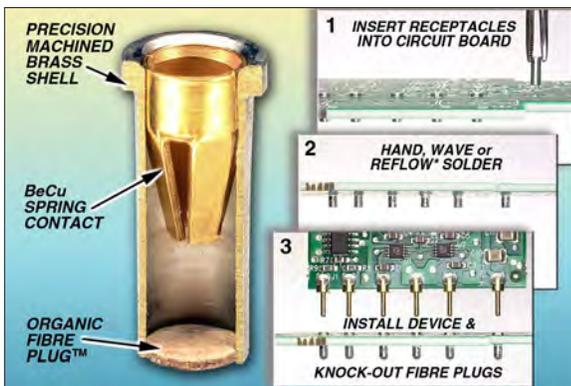
# ORGANIC FIBRE PLUG® RECEPTACLES

## RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER

Mill-Max's organic fibre plug (OFP®) solder barrier receptacles are discrete sockets for through-hole soldering into printed circuit boards. These open bottom receptacles are fitted with organic fibre plugs to prevent solder paste or flux from contaminating the internal contact during the pick & place and soldering process. When the device/mating lead is plugged into the receptacle, the OFP® is knocked out allowing the mating lead to pass through the fingers of the internal contact and make a reliable electrical connection.

OFP® receptacles are available to accommodate pin diameters from 0,20 - 2,59 (See pages 196 & 197 for the full line of standard OFP® receptacles). Packaging options are bulk or tape & reel (Per EIA- 481), standard reel size is 330mm. The advantage of tape & reel packaging is it allows these through-hole components to be placed simultaneously with surface mount parts on pick 'n place assembly lines -- eliminating the need to hand place the receptacles in an additional manufacturing step. The OFP® barrier permits the sockets to be vacuum picked from the tape prior to placement in the circuit board.

The knock-out-bottom feature enables these sockets to be made relatively short compared to many similar receptacles. The reduced length means minimal protrusion through the PCB. The open bottom receptacle design eliminates the need to trim long device leads that would otherwise bottom out in a closed design.



# PIN RECEPTACLES

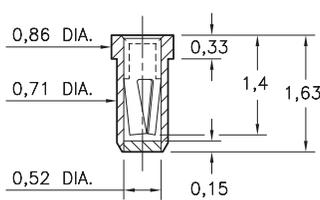
## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 250, 251 & 253)

- These through-hole (tubular) receptacles are designed for hand, wave or reflow\* soldering. The **ORGANIC FIBRE PLUG®** barrier prevents solder paste or flux from contaminating the spring contact.
- After soldering, the **OFP®** barrier is pushed out of the receptacle when the device is plugged in.
- All parts are available as discrete receptacles or supplied on carrier tape per EIA-481 to feed industry standard pick and place machines.

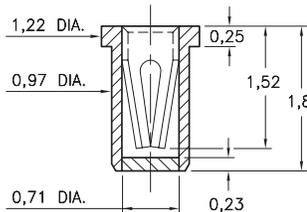
\*Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The receptacles are placed into plated through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated through-holes and achieve solder joints as reliable as wave soldering. The **OFP®** barrier prevents solder paste from being picked-up inside the contact during pick 'n place assembly. "Overprinting" paste on the solder mask can be used to adjust the volume of paste required to fill each hole.



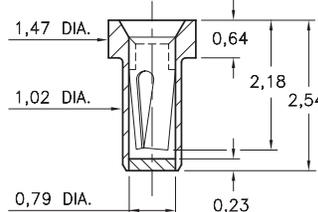
**4428**  
**4428-0-XX-XX-04-XX-10-0**  
Solder mount in  $\varnothing 0,81$  max. PTH  
**#04** Contact for  $\varnothing 0,20 - 0,33$  pins  
Also available on 16mm wide carrier tape:  
See page 194.15 for Tape & Reel details



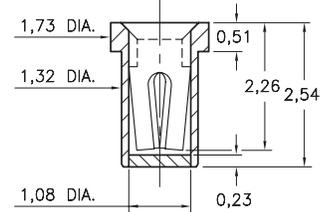
**5359**  
**5359-0-XX-XX-10-XX-10-0**  
Solder mount in  $\varnothing 1,09 \pm 0,08$  PTH  
**#10** Contact for  $\varnothing 0,30 - 0,43$  pins  
Also available on 16mm wide carrier tape:  
See page 194.15 for Tape & Reel details



**0577**  
**0577-0-XX-XX-21-XX-10-0**  
Solder mount in  $\varnothing 1,14 \pm 0,08$  PTH  
**#21** Contact for  $\varnothing 0,38 - 0,56$  pins  
Also available on 12mm wide carrier tape:  
See page 194.15 for Tape & Reel details



**4015**  
**4015-0-XX-XX-30-XX-10-0**  
Solder mount in  $\varnothing 1,45 \pm 0,08$  PTH  
**#30** Contact for  $\varnothing 0,38 - 0,64$  pins  
Also available on 8mm wide carrier tape:  
See page 194.15 for Tape & Reel details



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE: XXXX - 0 - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY PACKAGING:**

- 43** Discrete Receptacles
- 67** Supplied on 330mm Reels

**SPECIFY SHELL FINISH:**

- 01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- 80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 27** 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)
- 02** 2,54 $\mu$ m TIN/LEAD OVER NICKEL
- 84** 2,54 $\mu$ m TIN OVER NICKEL (RoHS)

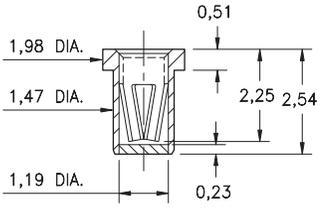
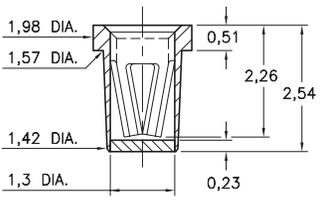
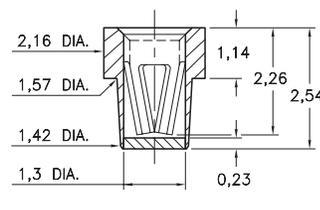
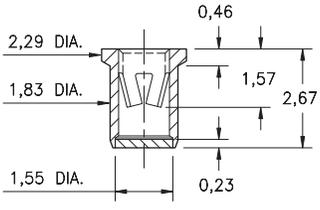
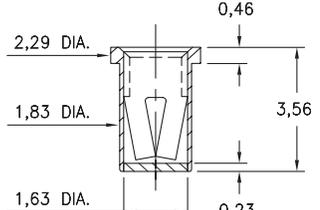
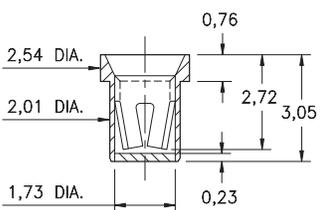
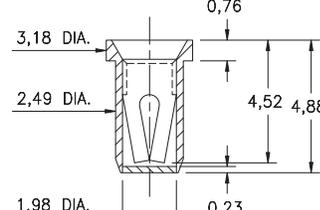
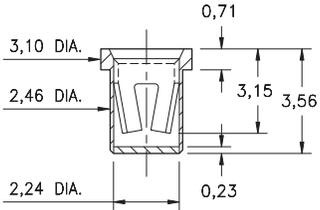
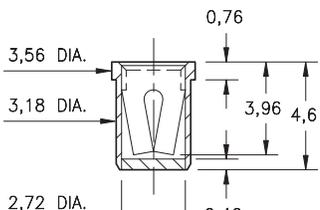
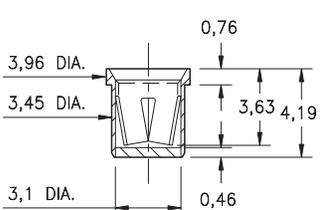
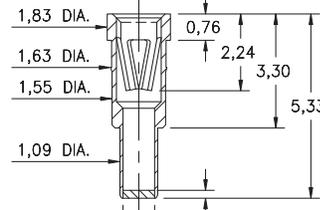
**CONTACT:**

**#04, #10, #21 or #30 CONTACT (DATA ON PAGES 250, 251 & 253)**



# PIN RECEPTACLES

## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 254 - 262)

<p><b>0337</b> <b>0337-0-XX-XX-15-XX-10-0</b> Solder mount in <math>\varnothing 1,68 \pm 0,08</math> PTH #15 Contact for <math>\varnothing 0,51 - 0,81</math> pins Also available on 8mm wide carrier tape: See page 194.15 for Tape &amp; Reel details</p> 	<p><b>4280</b> <b>4280-0-XX-XX-16-XX-10-0</b> Solder mount in <math>\varnothing 1,7 \pm 0,08</math> PTH #16 Contact for <math>\varnothing 0,56 - 0,86</math> pins Also available on 8mm wide carrier tape: See page 194.15 for Tape &amp; Reel details</p> 	<p><b>5280</b> <b>5280-0-XX-XX-16-XX-40-0</b> Solder mount in <math>\varnothing 1,7 \pm 0,08</math> PTH #16 Contact for <math>\varnothing 0,56 - 0,86</math> pins Also available on 16mm wide carrier tape: See page 194.16 for Tape &amp; Reel details</p> 	<p><b>0332</b> <b>0332-0-XX-XX-18-XX-10-0</b> Solder mount in <math>\varnothing 2,01 \pm 0,08</math> PTH #18 Contact for <math>\varnothing 0,94 - 1,09</math> pins Also available on 16mm wide carrier tape: See page 194.16 for Tape &amp; Reel details</p> 
<p><b>0479</b> <b>0479-0-XX-XX-34-XX-10-0</b> Solder mount in <math>\varnothing 1,96 \pm 0,08</math> PTH #34 Contact for <math>\varnothing 0,81 - 1,17</math> pins Also available on 16mm wide carrier tape: See page 194.16 for Tape &amp; Reel details</p> 	<p><b>0375</b> <b>0375-0-XX-XX-02-XX-10-0</b> Solder mount in <math>\varnothing 2,21 \pm 0,08</math> PTH #02 Contact for <math>\varnothing 1,02 - 1,27</math> pins Also available on 12mm wide carrier tape: See page 194.16 for Tape &amp; Reel details</p> 	<p><b>0353</b> <b>0353-0-XX-XX-03-XX-10-0</b> Solder mount in <math>\varnothing 2,69 \pm 0,08</math> PTH #03 Contact for <math>\varnothing 1,02 - 1,52</math> pins Also available on 12mm wide carrier tape: See page 194.16 for Tape &amp; Reel details</p> 	<p><b>0384</b> <b>0384-0-XX-XX-23-XX-10-0</b> Solder mount in <math>\varnothing 2,67 \pm 0,08</math> PTH #23 Contact for <math>\varnothing 1,14 - 1,65</math> pins Also available on 12mm wide carrier tape: See page 194.16 for Tape &amp; Reel details</p> 
<p><b>0376</b> <b>0376-0-XX-XX-07-XX-10-0</b> Solder mount in <math>\varnothing 3,38 \pm 0,08</math> PTH #07 Contact for <math>\varnothing 1,65 - 2,08</math> pins Also available on 16mm wide carrier tape: See page 194.17 for Tape &amp; Reel details</p> 	<p><b>0321</b> <b>0321-0-XX-XX-08-XX-10-0</b> Solder mount in <math>\varnothing 3,66 \pm 0,08</math> PTH #08 Contact for <math>\varnothing 2,13 - 2,59</math> pins Also available on 16mm wide carrier tape: See page 194.17 for Tape &amp; Reel details</p> 	<p><b>3435</b> <b>3435-0-XX-XX-47-XX-04-0</b> Solder mount in <math>\varnothing 1,17 \pm 0,08</math> PTH #47 Contact for <math>\varnothing 0,64 - 0,94</math> &amp; <math>0,64 \square</math> pins Also available on 24mm wide carrier tape: See page 194.17 for Tape &amp; Reel details</p> 	

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions:** Millimeters  
**Tolerances On:** Lengths:  $\pm 0,13$   
 Diameters:  $\pm 0,051$   
 Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - 0 - XX - XX - XX - XX - XX - 0

### BASIC PART #

**SPECIFY PACKAGING:**

- 43 Discrete Receptacles
- 67 Supplied on 330mm Reels

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)
- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)

**CONTACT:**

#02, #07, #08, #15, #16, #18, #23, #34 or #47 CONTACT (DATA ON PAGES 254 - 262)



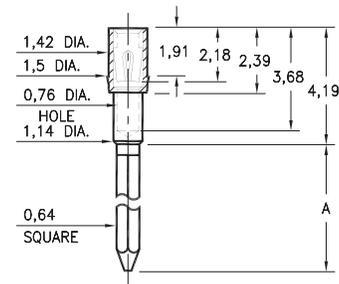
# WRAPOST RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 1702/1703

170X-X-15-XX-30-XX-02-0

Press-fit in 1,45 mounting hole

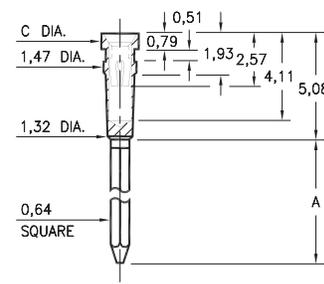


Basic Part Number	# of Wraps	Length A
1702-2	2	9,4
1703-3	3	12,95

## 0038⇨0040/0066⇨0068

00XX-X-17-XX-30-XX-02-0

Press-fit in 1,45 mounting hole

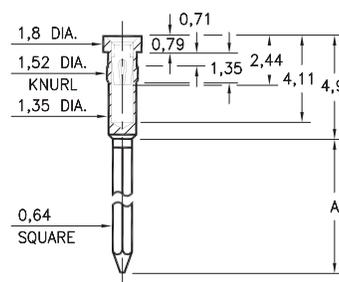


Basic Part #	# of Wraps	Length A	Dia. C
0040-1	1	6,6	
0039-2	2	9,14	1,83
0038-3	3	12,7	
0068-1	1	6,6	
0067-2	2	9,14	1,57
0066-3	3	12,7	

## 0086/0088/0089

008X-X-17-XX-3X-XX-02-0

Press-fit in 1,45 mounting hole

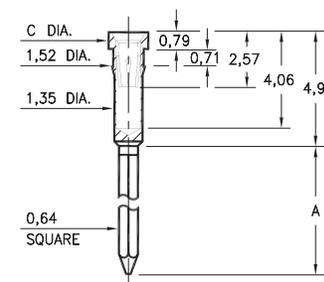


Basic Part Number	# of Wraps	Length A
0089-2	2	9,4
0088-3	3	12,95
0086-4	4	16,0

## 1030⇨1036

103X-X-17-XX-3X-XX-02-0

Press-fit in 1,45 mounting hole

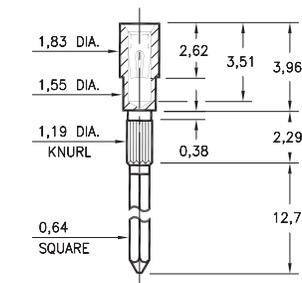


Basic Part #	# of Wraps	Length A	Dia. C
1032-1	1	6,6	
1031-2	2	9,14	1,83
1030-3	3	12,95	
1036-1	1	6,6	
1035-2	2	9,14	1,57
1034-3	3	12,95	

## 1045

1045-3-17-XX-30-XX-02-0

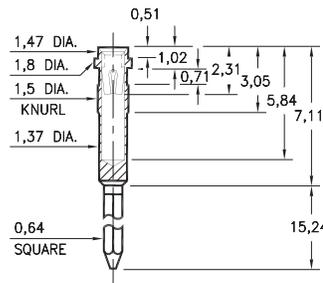
Press-fit in 1,09 mounting hole



## 1040

1040-3-17-XX-30-XX-02-0

Press-fit in 1,42 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - 17 - XX - XX - XX - 02 - 0

**BASIC PART #** →

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30 or #32 CONTACT (DATA ON PAGE 253)**

(For alternate contact choices, see groups B and C on page 248)



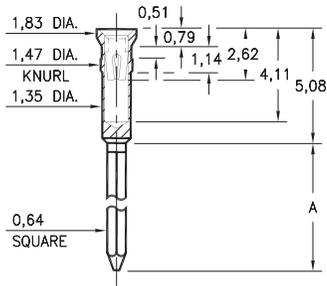
# WRAPOST RECEPTACLES

FOR 0,38 - 0,64 DIAMETER PINS

## 0444

0444-X-17-XX-30-XX-02-0

Press-fit in 1,42 mounting hole

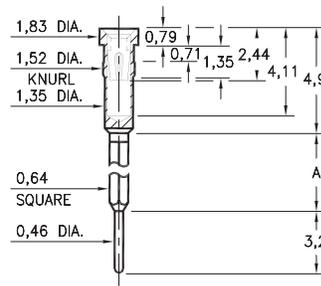


Basic Part Number	# of Wraps	Length A
0444-1	1	6,6
0444-2	2	9,4
0444-3	3	12,83

## 2601 ⇔ 2603

260X-0-17-XX-30-XX-02-0

Press-fit in 1,45 mounting hole

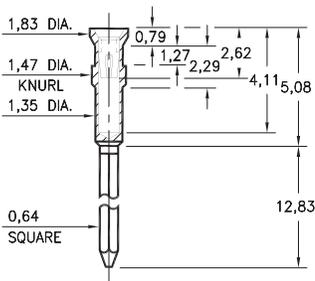


Basic Part Number	# of Wraps	Length A
2601-0	1	5,89
2602-0	2	8,89
2603-0	3	11,89

## 0445

0445-3-17-XX-30-XX-02-0

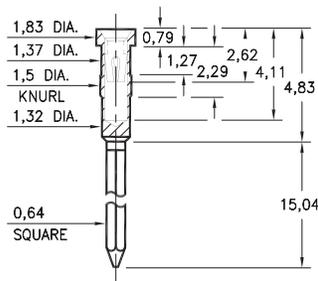
Press-fit in 1,42 mounting hole



## 1047

1047-3-17-XX-30-XX-02-0

Press-fit in 1,42 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - 17 - XX - 30 - XX - 02 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 02 2,54µm TIN/LEAD OVER NICKEL
- ◆ 84 2,54µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#30 or #32 CONTACT (DATA ON PAGE 253)**

(For alternate contact choices, see groups B and C on page 248)



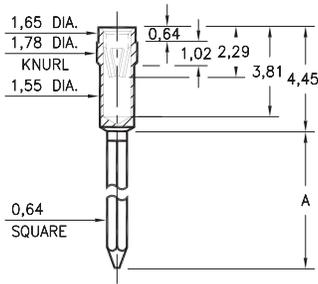
# WRAPOST RECEPTACLES

**FOR 0,56 - 0,81 DIAMETER PINS (#06 CONTACT)**  
**FOR 0,56 - 0,86 DIAMETER PINS (#16 CONTACT)**

## 2297

**2297-X-17-XX-16-XX-02-0**

Press-fit in 1,70 mounting hole

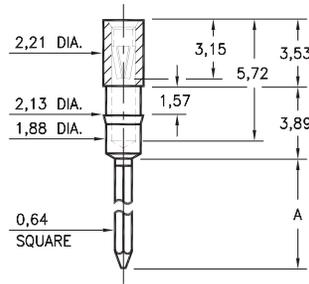


Basic Part Number	# of Wraps	Length A
<b>2297-2</b>	2	9,4
<b>2297-3</b>	3	10,92

## 0280

**0280-X-17-XX-06-XX-02-0**

Press-fit in 2,06 mounting hole

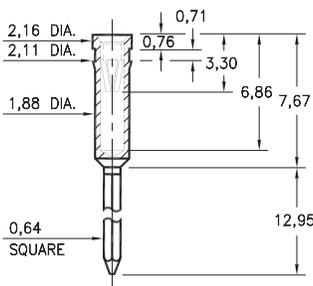


Basic Part Number	# of Wraps	Length A
<b>0280-2</b>	2	9,14
<b>0280-3</b>	3	12,95

## 0281

**0281-3-17-XX-06-XX-02-0**

Press-fit in 2,03 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13

Diameters: ± 0,051

Angles: ± 2°



**ORDER CODE:** XXXX - X - 17 - XX - XX - XX - 02 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 27 0,76µm GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#06 or #16 CONTACT (DATA ON PAGES 255 & 256)**  
 (For alternate contact choices, see group D on page 248)



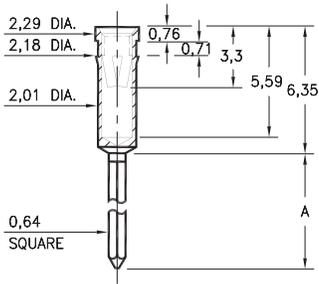
# WRAPOST RECEPTACLES

FOR 0,81 - 1,17 DIAMETER PINS

## 1052/1053

105X-X-17-XX-34-XX-02-0

Press-fit in 2,11 mounting hole

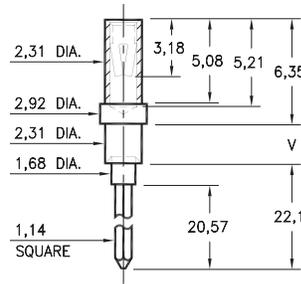


Basic Part Number	# of Wraps	Length A
1053-2	2	9,14
1052-3	3	13,08

## 0383

0383-X-17-XX-34-XX-02-0

Swage mount in 2,39 hole

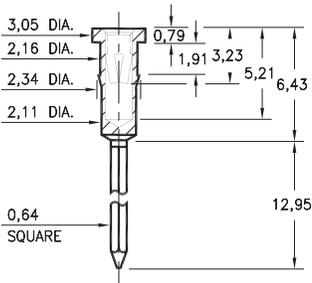


Basic Part Number	Board Thickness	Length V
0383-1	1,57	2,39
0383-2	2,39	3,18
0383-3	3,18	3,96

## 0382

0382-3-17-XX-34-XX-02-0

Press-fit in 2,26 mounting hole



### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
 Diameters:  $\pm 0,051$   
 Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - 17 - XX - 34 - XX - 02 - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 27 0,76 $\mu$ m GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#34 CONTACT (DATA ON PAGE 258)**

(For alternate contact choices, see group E on page 248)





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# MALE PCB PINS





WWW.MILL-MAX.COM

**MILL-MAX PRINTED CIRCUIT PINS ARE MACHINED INDIVIDUAL PINS USED FOR VARIOUS PLUG-IN APPLICATIONS AND ARE FUNCTIONALLY THE DYNAMIC BUILDING BLOCKS WITHIN AN INTERCONNECT SYSTEM.**

Mill-Max offers a variety of pins in a broad range of diameters as well as turret, slotted, bifurcated (forked), soldercup and wrapost style pins. They are commonly fastened to printed circuit boards or other housings by being press-fit, swaged (riveted) or soldered.

PCB pins serve not only as a conductive path for an electrical circuit, but provide strength to an assembly module as a mechanical interface. Mill-Max Mfg. Corp. has developed thousands of state-of-the-art "basic pin" designs, featuring pin barrel geometries for our customers who require outside-the-box solutions to their interconnect needs.

In addition to the products found on the following pages, Mill-Max offers the following stock materials and diameters available for manufacture:

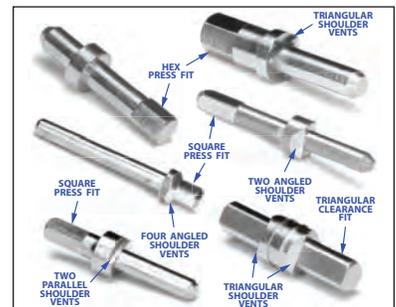
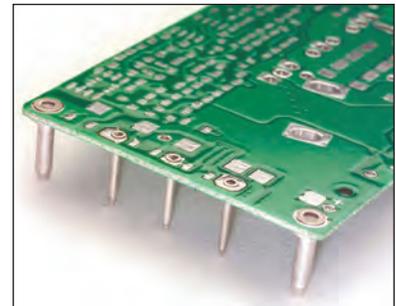
**BRASS Alloy 360**, 1/2 hard: 1,57/1,83/1,98/2,36/3,18/3,96/4,75/6,35 diameters

**PHOSPHOR BRONZE Alloy 544**: 1,57/1,83/1,98 diameters

**TELLURIUM COPPER Alloy 145**: 2,01/2,36/3,18/3,96 diameters

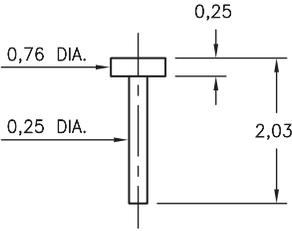
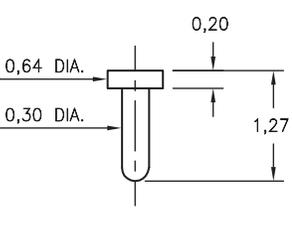
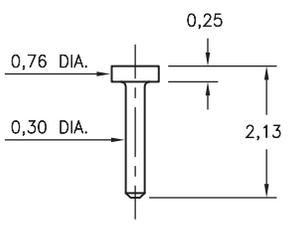
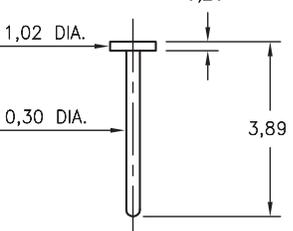
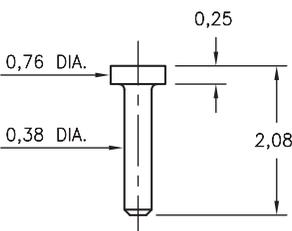
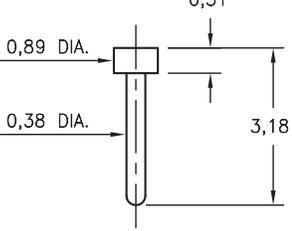
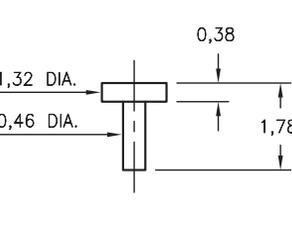
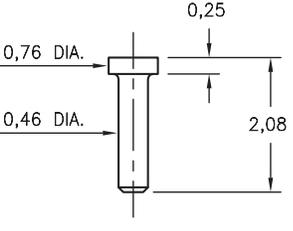
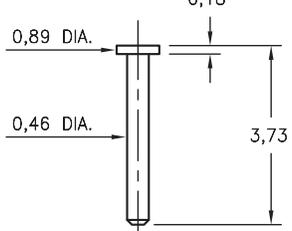
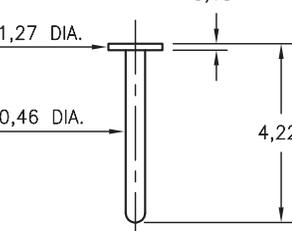
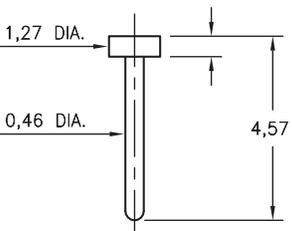
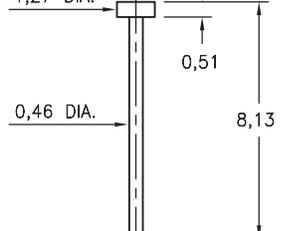
Mill-Max will gladly quote application specific products. Please complete the specification sheet on page **247** or send us your own drawings.

We assure you a fast response.



# MALE PCB PINS

## PRINTED CIRCUIT PINS • NAIL HEAD TYPE

<p><b>4184</b> 4184-0-00-XX-00-00-33-0 Solder mount in 0,36 mounting hole</p> 	<p><b>9050</b> 9050-0-00-XX-00-00-33-0 Solder mount in 0,41 mounting hole</p> 	<p><b>4353</b> 4353-0-00-XX-00-00-33-0 Solder mount in 0,41 mounting hole</p> 	<p><b>9083</b> 9083-0-00-XX-00-00-38-0 Solder mount in 0,41 mounting hole</p> 
<p><b>4825</b> 4825-0-00-XX-00-00-33-0 Solder mount in 0,48 mounting hole Also available on 16mm wide carrier tape: 3,250 parts per 330mm reel. See page 224.1 for Tape &amp; Reel details</p> 	<p><b>4689</b> 4689-0-00-XX-00-00-33-0 Solder mount in 0,48 mounting hole</p> 	<p><b>4361</b> 4361-0-00-XX-00-00-33-0 Solder mount in 0,56 mounting hole</p> 	<p><b>4288</b> 4288-0-00-XX-00-00-33-0 Solder mount in 0,56 mounting hole</p> 
<p><b>4068</b> 4068-0-00-XX-00-00-33-0 Solder mount in 0,56 mounting hole</p> 	<p><b>9113</b> 9113-0-00-XX-00-00-38-0 Solder mount in 0,56 mounting hole</p> 	<p><b>9137</b> 9137-0-00-XX-00-00-38-0 Solder mount in 0,56 mounting hole</p> 	<p><b>5137</b> 5137-0-00-XX-00-00-38-0 Solder mount in 0,56 mounting hole</p> 

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
( Except where noted )

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - 00 - XX - 00 - 00 - XX - 0

**BASIC PART #** →

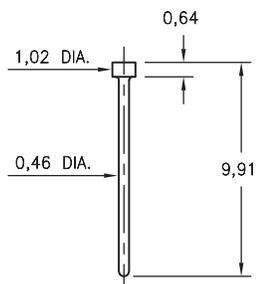
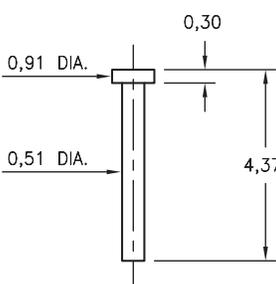
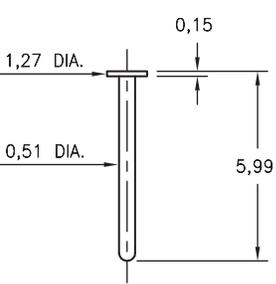
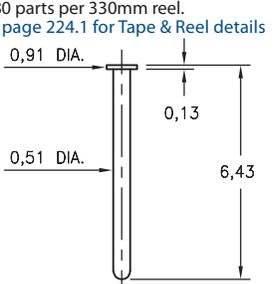
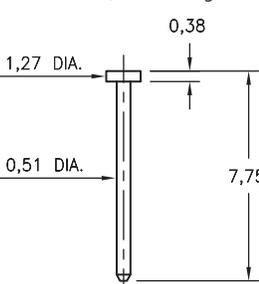
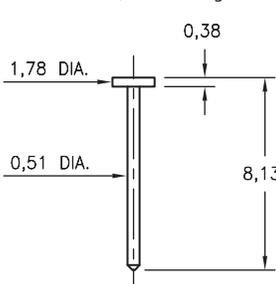
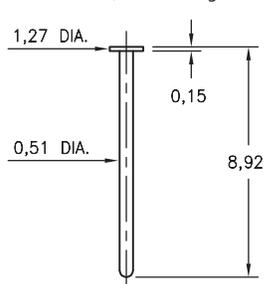
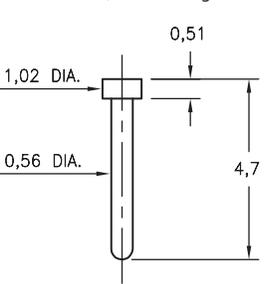
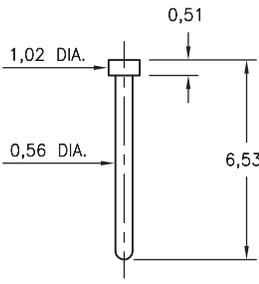
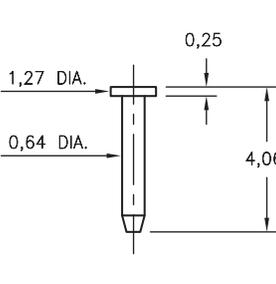
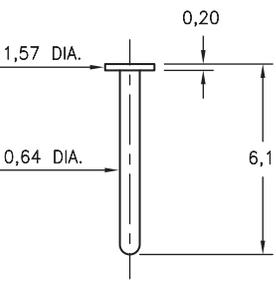
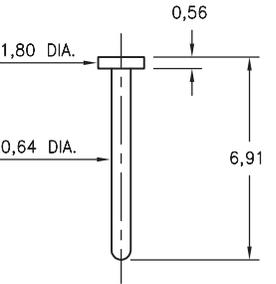
**SPECIFY PIN FINISH:**

- 01 5,08μm TIN/LEAD OVER NICKEL
- ◆ 80 5,08μm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25μm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51μm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27μm GOLD OVER NICKEL (RoHS)



# MALE PCB PINS

## PRINTED CIRCUIT PINS • NAIL HEAD TYPE

<p><b>4209</b> 4209-0-00-XX-00-00-33-0 Solder mount in 0,56 mounting hole</p> 	<p><b>5063</b> 5063-0-00-XX-00-00-33-0 Solder mount in 0,61 mounting hole</p> 	<p><b>4965</b> 4965-0-00-XX-00-00-33-0 Solder mount in 0,61 mounting hole</p> 	<p><b>6547</b> 6547-0-00-XX-00-00-33-0 Solder mount in 0,61 mounting hole Also available on 24mm wide carrier tape: 1,080 parts per 330mm reel. See page 224.1 for Tape &amp; Reel details</p> 
<p><b>4071</b> 4071-0-00-XX-00-00-33-0 Solder mount in 0,61 mounting hole</p> 	<p><b>8808</b> 8808-0-00-XX-00-00-33-0 Solder mount in 0,61 mounting hole</p> 	<p><b>4964</b> 4964-0-00-XX-00-00-33-0 Solder mount in 0,61 mounting hole</p> 	<p><b>9185</b> 9185-0-00-XX-00-00-33-0 Solder mount in 0,67 mounting hole</p> 
<p><b>8257</b> 8257-0-00-XX-00-00-33-0 Solder mount in 0,66 mounting hole</p> 	<p><b>5035</b> 5035-0-00-XX-00-00-33-0 Solder mount in 0,74 mounting hole</p> 	<p><b>5240</b> 5240-0-00-XX-00-00-33-0 Solder mount in 0,74 mounting hole</p> 	<p><b>2650</b> 2650-0-00-XX-00-00-33-0 Solder mount in 0,74 mounting hole</p> 

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



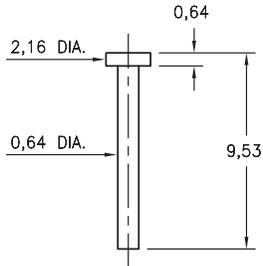
# MALE PCB PINS

## PRINTED CIRCUIT PINS • NAIL HEAD TYPE

### 5062

5062-0-00-XX-00-00-33-0

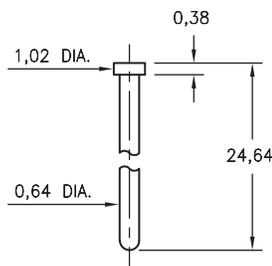
Solder mount in 0,74 mounting hole



### 8451

8451-0-00-XX-00-00-33-0

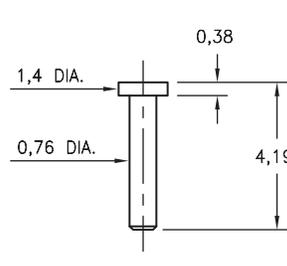
Solder mount in 0,74 mounting hole



### 6477

6477-0-00-XX-00-00-38-0

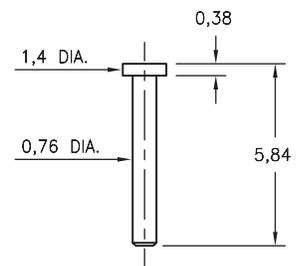
Solder mount in 0,86 mounting hole



### 4477

4477-0-00-XX-00-00-33-0

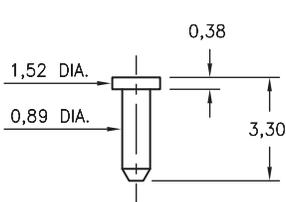
Solder mount in 0,86 mounting hole



### 4268

4268-0-00-XX-00-00-33-0

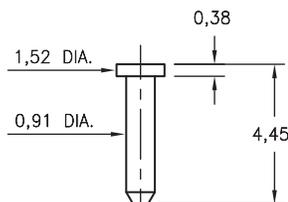
Solder mount in 0,99 mounting hole



### 9086

9086-0-00-XX-00-00-33-0

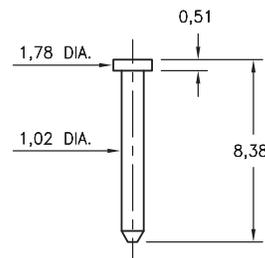
Solder mount in 1,02 mounting hole



### 8330

8330-0-00-XX-00-00-38-0

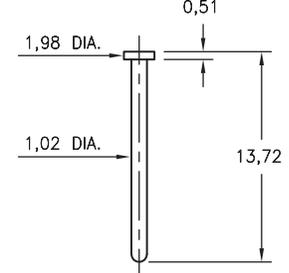
Solder mount in 1,12 mounting hole



### 9228

9228-0-00-XX-00-00-38-0

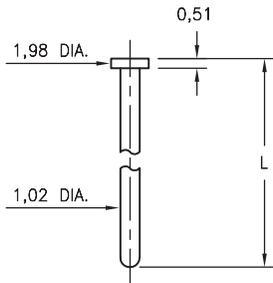
Solder mount in 1,12 mounting hole



### 6095

6095-X-00-XX-00-00-38-0

Solder mount in 1,12 mounting hole

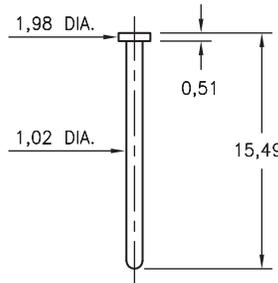


Basic Part Number	Length L
6095-0	14,73
6095-1	12,07

### 6092

6092-0-00-XX-00-00-33-0

Solder mount in 1,12 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
( Except where noted )

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

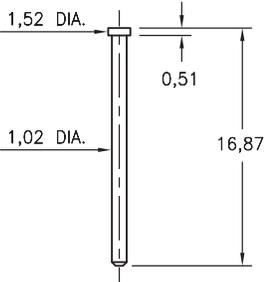
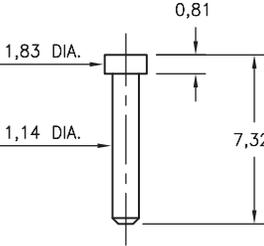
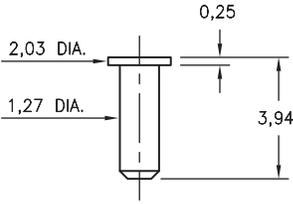
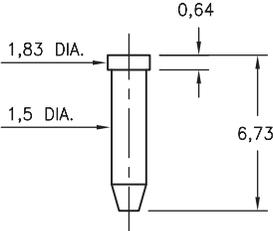
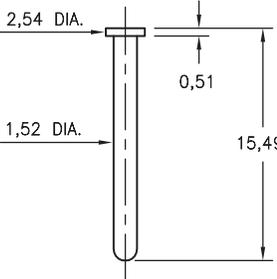
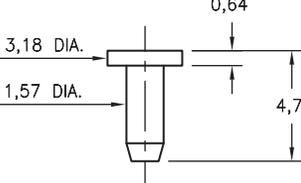
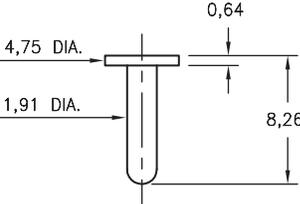
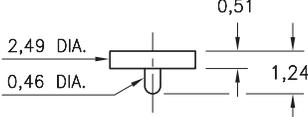
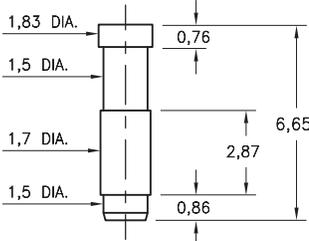
SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



# MALE PCB PINS

## PRINTED CIRCUIT PINS • NAIL HEAD TYPE

<p><b>1179</b> 1179-0-00-XX-00-00-33-0 Solder mount in 1,12 mounting hole</p> 	<p><b>9872</b> 9872-0-00-XX-00-00-33-0 Solder mount in 1,24 mounting hole</p> 	<p><b>2381</b> 2381-0-00-XX-00-00-33-0 Solder mount in 1,37 mounting hole Also available on 16mm wide carrier tape: 1,800 parts per 330mm reel. See page 224.1 for Tape &amp; Reel details</p> 	<p><b>9265</b> 9265-0-00-XX-00-00-38-0 Solder mount in 1,6 mounting hole Also available on 16mm wide carrier tape: 1,170 parts per 330mm reel. See page 224.1 for Tape &amp; Reel details</p> 
<p><b>6142</b> 6142-0-00-XX-00-00-33-0 Solder mount in 1,63 mounting hole</p> 	<p><b>9022</b> 9022-0-00-XX-00-00-33-0 Solder mount in 1,68 mounting hole Also available on 24mm wide carrier tape: 1,500 parts per 330mm reel. See page 224.1 for Tape &amp; Reel details</p> 	<p><b>8086</b> 8086-0-00-XX-00-00-33-0 Solder mount in 2,01 mounting hole</p> 	<p><b>4541</b> 4541-0-00-XX-00-00-03-0 Solder mount in 0,56 mounting hole</p> 
<p><b>1980</b> 1980-0-00-00-XX-00-03-0 Surface mount, Target Connector Also available on carrier tape: 1,450 parts per 330mm reel. Order as: 319-10-1XX-40-080001</p> 			

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - 0 - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)

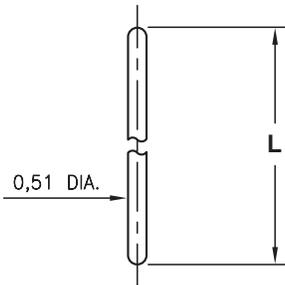


# MALE PCB PINS

## STRAIGHT AND RIGHT ANGLE PINS

### 3320

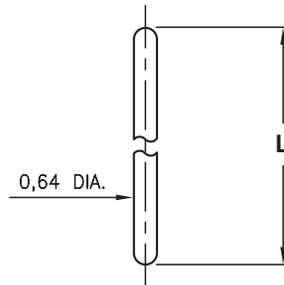
3320-X-00-XX-00-00-03-0



Basic Part Number	Length L
3320-0	6,35
3320-1	12,7

### 3325/6527

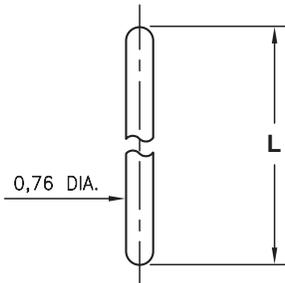
XXXX-X-00-XX-00-00-03-0



Basic Part Number	Length L
3325-0	6,35
3325-1	12,7
3325-2	19,05
6527-0	10,67

### 3330

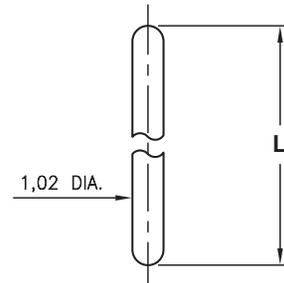
3330-X-00-XX-00-00-03-0



Basic Part Number	Length L
3330-0	6,35
3330-1	12,7
3330-2	19,05

### 3340

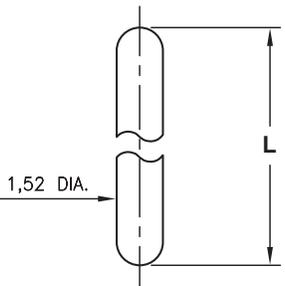
3340-X-00-XX-00-00-03-0



Basic Part Number	Length L
3340-0	6,35
3340-1	12,7
3340-2	19,05

### 3560

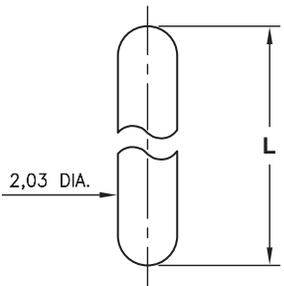
3560-X-00-XX-00-00-03-0



Basic Part Number	Length L
3560-0	6,35
3560-1	12,7
3560-2	19,05

### 3580

3580-X-00-XX-00-00-03-0



Basic Part Number	Length L
3580-0	6,35
3580-1	12,7
3580-2	19,05

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

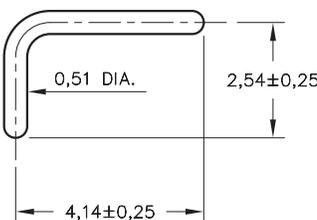
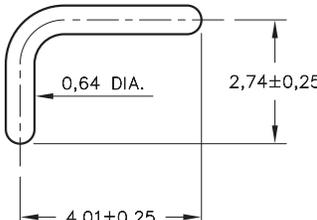
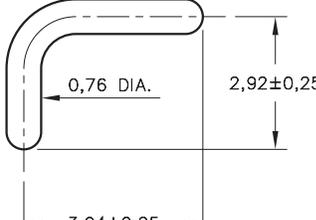
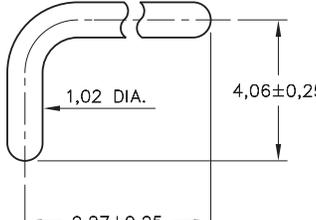
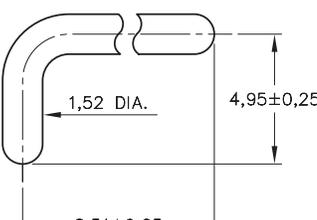
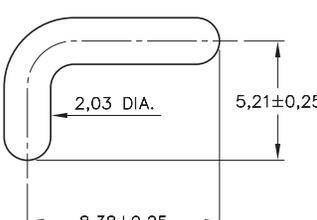
SPECIFY PIN FINISH:

- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)



# MALE PCB PINS

## RIGHT ANGLE PINS

<p><b>3720</b> 3720-0-14-XX-00-00-03-0 Right Angle Bent Pin</p> 	<p><b>3725</b> 3725-0-14-XX-00-00-03-0 Right Angle Bent Pin</p> 	<p><b>3730</b> 3730-0-14-XX-00-00-03-0 Right Angle Bent Pin</p> 	<p><b>3740</b> 3740-0-14-XX-00-00-03-0 Right Angle Bent Pin</p> 
<p><b>3760</b> 3760-0-14-XX-00-00-03-0 Right Angle Bent Pin</p> 	<p><b>3780</b> 3780-0-14-XX-00-00-03-0 Right Angle Bent Pin</p> 		

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
( Except where noted )

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm .005$   
Diameters:  $\pm .002$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** 37XX - X - 00 - XX - 00 - 00 - 03 - 0

**BASIC PART #** →

→ **SPECIFY PIN FINISH:**

- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)



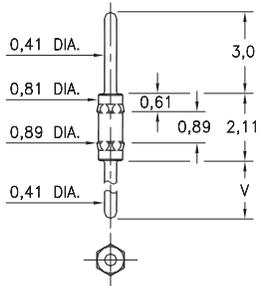
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 4006

4006-X-00-XX-00-00-03-0

Hex press-fit in 0,86 mounting hole

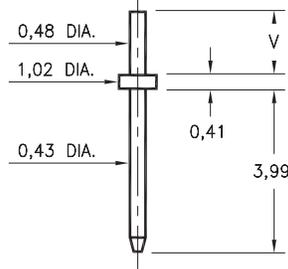


Basic Part Number	Length V
4006-0	3,0
4006-1	4,78
4006-2	7,32

### 3121

3121-X-00-XX-00-00-08-0

Solder mount in 0,58 mounting hole  
Material is annealed.

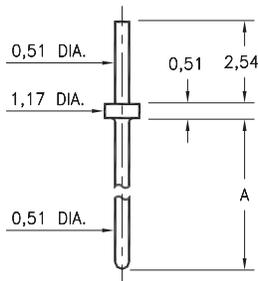


Basic Part Number	Substrate Thickness	Length V
3121-1	0,64	1,55
3121-2	1,02	1,91

### 3128

3128-X-00-XX-00-00-08-0

Solder mount in 0,61 min. mounting hole

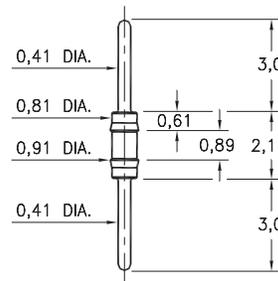


Basic Part Number	Length A
3128-1	6,35
3128-2	10,8
3128-3	13,34
3128-4	14,22
3128-5	23,62

### 3006

3006-0-00-XX-00-00-03-0

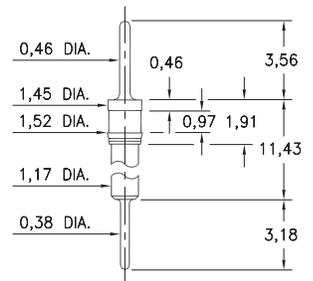
Press-fit in 0,86 mounting hole



### 8885

8885-0-00-XX-00-00-03-0

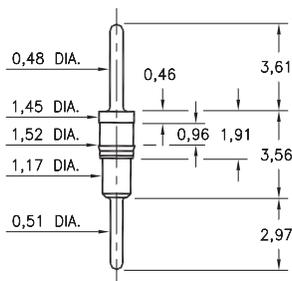
Press-fit in 1,45 mounting hole



### 6218

6218-0-00-XX-00-00-03-0

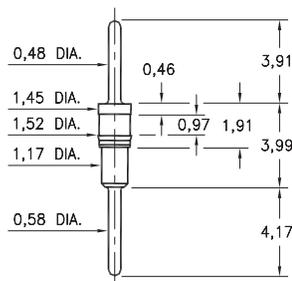
Press-fit in 1,45 mounting hole



### 5012

5012-0-00-XX-00-00-03-0

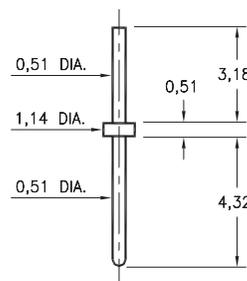
Press-fit in 1,45 mounting hole



### 9081

9081-0-00-XX-00-00-08-0

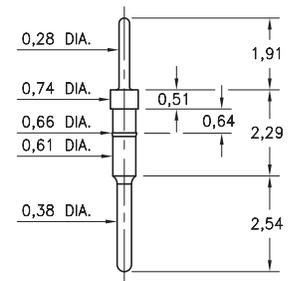
Solder mount in 0,61 mounting hole



### 3039

3039-0-00-15-00-00-03-0

Press-fit in .025 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



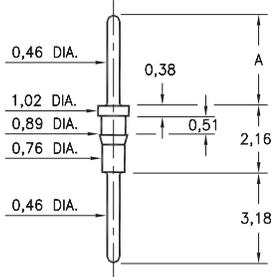
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 8685/9036

XXXX-0-00-XX-00-00-03-0

Press-fit in 0,84 mounting hole  
Pin material is Phosphor Bronze 544 (B2)

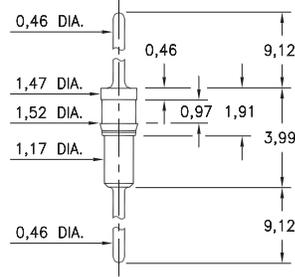


Basic Part Number	Length A
8685-0	3,18
9036-0	4,45

### 9051

9051-0-00-XX-00-00-03-0

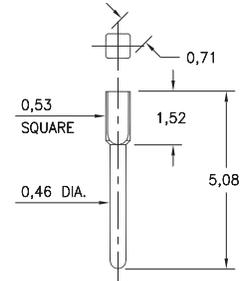
Press-fit in 1,45 mounting hole



### 8969

8969-0-05-XX-00-00-03-0

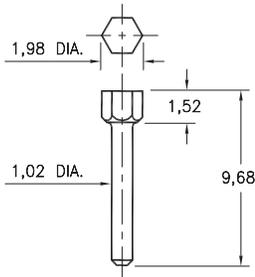
Square press-fit in 0,58 plated through-hole (Use .7mm drill prior to plating)



### 8979

8979-0-00-XX-00-00-03-0

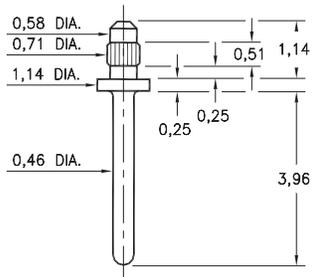
Hex press-fit in 1,88 plated through-hole



### 9159

9159-0-00-XX-00-00-03-0

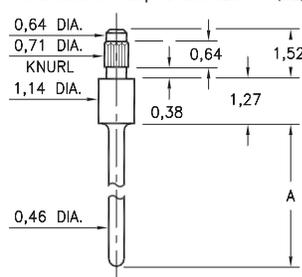
Press-fit in 0,66 mounting hole



### 3155/5155

X155-0-00-XX-00-00-03-0

Press-fit in 0,66 mounting hole  
Pin material is Phosphor Bronze 544 (B2)

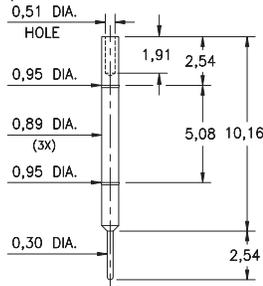


Basic Part Number	Length A
3155-0	4,57
5155-0	3,30

### 4194

4194-0-00-XX-00-00-08-0

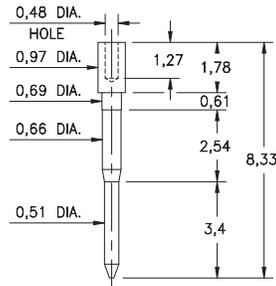
Wire crimp termination & press-fit in 0,91 hole  
Accepts wire sizes 30 AWG Max. / 36 AWG Min.



### 5556

5556-0-00-XX-00-00-38-0

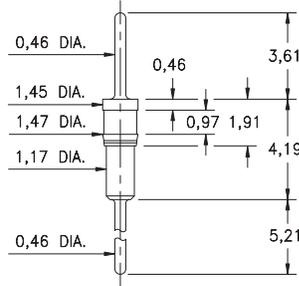
Wire crimp termination. Accepts wire sizes 30 AWG Max. / 36 AWG Min.



### 3790

3790-0-00-XX-00-00-03-0

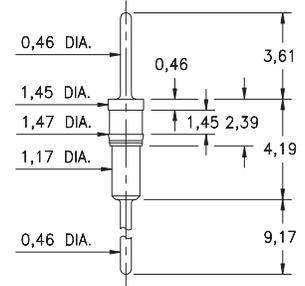
Press-fit in 1,45 mounting hole



### 3796

3796-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



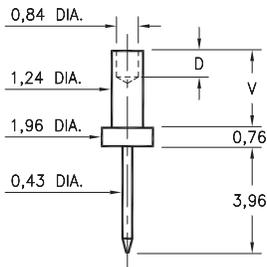
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3116

3116-X-00-XX-00-00-08-0

Swage mount in 1,32 hole

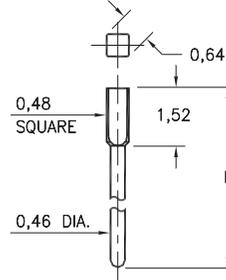


Basic Part Number	Board Thickness	Length V	Depth D
3116-1	0,79	1,30	0,89
3116-2	1,57	2,08	1,57
3116-3	2,39	2,87	1,57
3116-4	3,18	3,68	1,57

### X435

X435-X-05-XX-00-00-03-0

Square press-fit in 0,56 plated through-hole

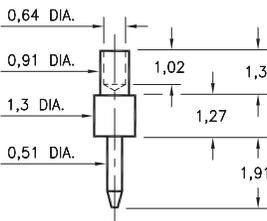


Basic Part Number	Length L
5435-0	7,70
5435-1	5,08
5435-2	10,49
6435-0	7,11

### 3135

3135-1-00-XX-00-00-08-0

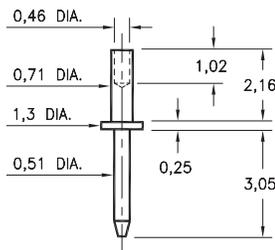
Swage mount in 1,02 hole  
For 0,79 thick board



### 3210

3210-2-00-XX-00-00-08-0

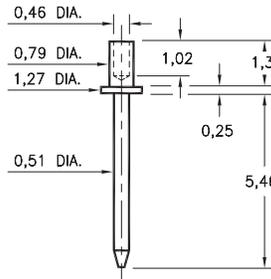
Swage mount in 0,79 hole  
For 1,57 thick board



### 3129

3129-1-00-XX-00-00-08-0

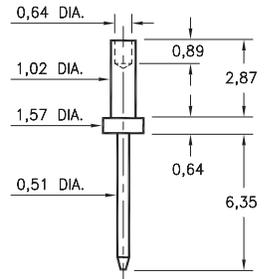
Swage mount in 0,89 hole  
For 0,79 thick board



### 3147

3147-3-00-XX-00-00-08-0

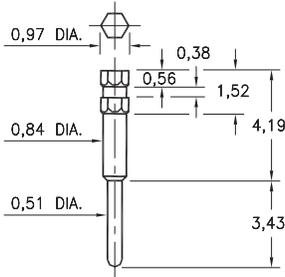
Swage mount in 1,09 hole  
For 2,39 thick board



### 4366

4366-0-00-XX-00-00-03-0

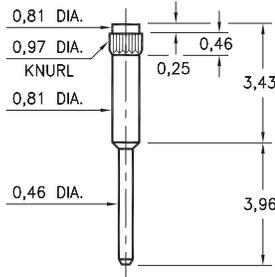
Hex press-fit in 0,86 plated through-hole



### 1267

1267-0-00-XX-00-00-03-0

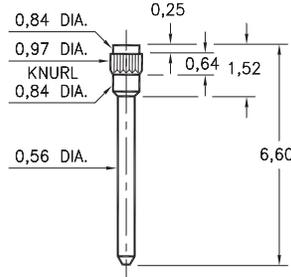
Press-fit in 0,89 mounting hole



### 7827

7827-0-00-XX-00-00-03-0

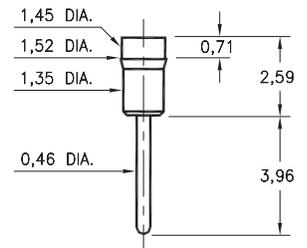
Press-fit in 0,89 mounting hole



### 1130

1130-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole  
Pin material is Phosphor Bronze 544 (B2)



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



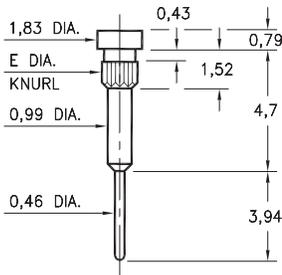
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 1067

1067-X-00-XX-00-00-03-0

Press-fit in 1,07/1,40 mounting hole

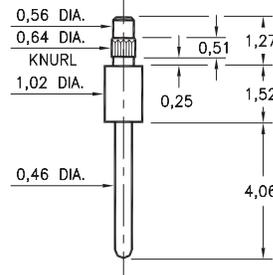


Basic Part Number	Knurl Dia. E	Mounting Hole
1067-1	1,47	1,40
1067-2	1,14	1,07

### 3158

3158-0-00-XX-00-00-03-0

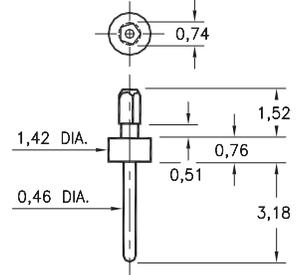
Press-fit in 0,58 mounting hole



### 9000

9000-0-00-XX-00-00-03-0

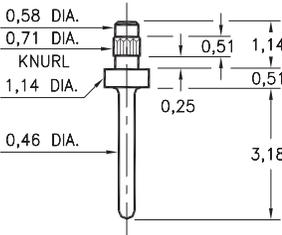
Pentagonal press-fit in 0,64 plated through-hole



### 3157

3157-0-00-XX-00-00-03-0

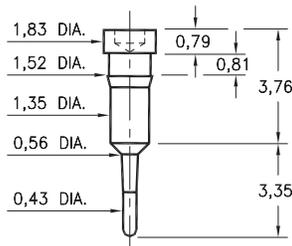
Press-fit in 0,66 mounting hole



### 0915

0915-0-00-XX-00-00-03-0

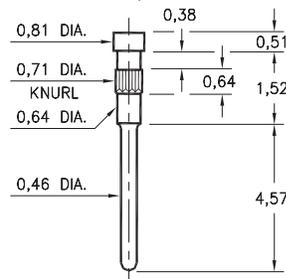
Press-fit in 1,45 mounting hole



### 3154

3154-0-00-XX-00-00-03-0

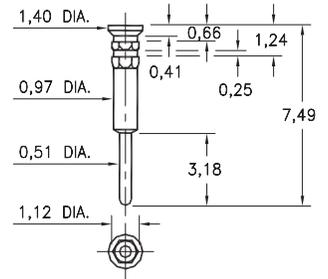
Press-fit in 0,66 mounting hole  
Pin material is Phosphor Bronze 544 (B2)



### 0542

0542-0-00-XX-00-00-03-0

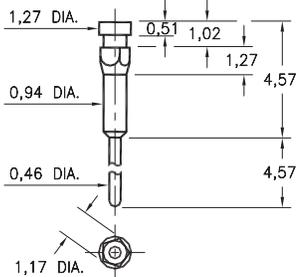
Hex press-fit in 0,99 plated through-hole



### 0522

0522-0-00-XX-00-00-03-0

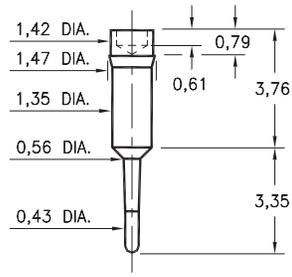
Pentagonal press-fit in 1,07 plated through-hole



### 0952

0952-0-00-XX-00-00-03-0

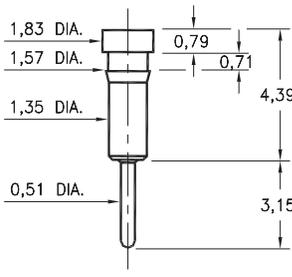
Press-fit in 1,42 mounting hole



### 0257

0257-0-00-XX-00-00-03-0

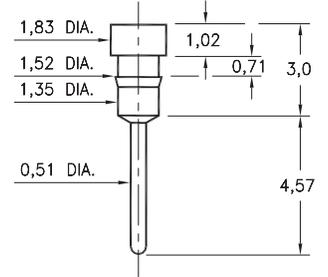
Press-fit in 1,50 mounting hole



### 8940

8940-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



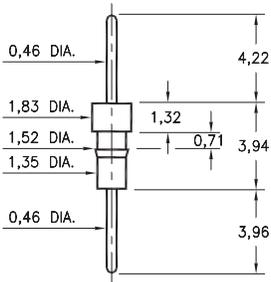
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 0504/0505

050X-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

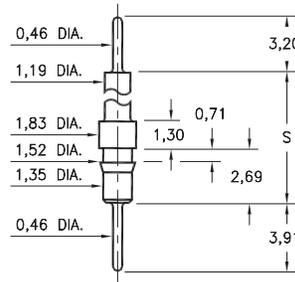


Basic Part Number	Pin Material
0504-0	Phosphor Bronze 544
0505-0	Brass 360

### 5510/5511

551X-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

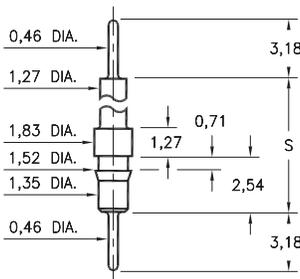


Basic Part Number	Standoff Height S
5510-0	8,41
5511-0	15,39

### 4259

4259-X-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

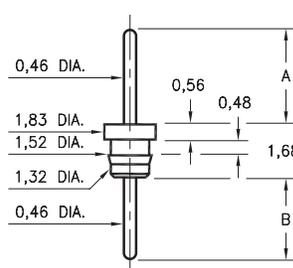


Basic Part Number	Standoff Height S
4259-1	5,33
4259-2	8,51
4259-3	14,86
4259-4	21,21

### X516

X516-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

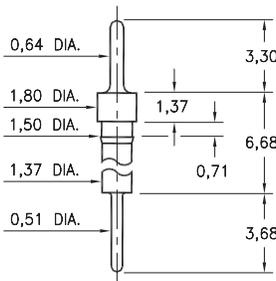


Basic Part Number	Pin Length A	Pin Length B
3516-0	3,18	2,74
4516-0	3,43	3,0

### 8859

8859-0-00-XX-00-00-03-0

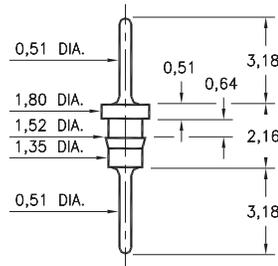
Press-fit in 1,42 mounting hole



### 6585

6585-0-00-XX-00-00-03-0

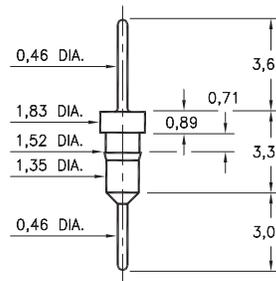
Press-fit in 1,45 mounting hole  
Pin material is Phosphor Bronze 544 (B2)



### 3404

3404-0-00-XX-00-00-03-0

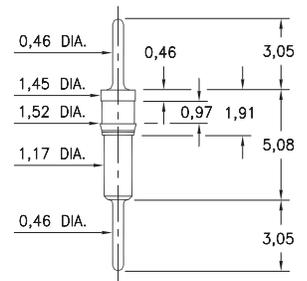
Press-fit in 1,45 mounting hole



### 9218

9218-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



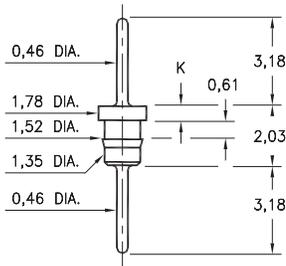
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 1752/6458

XXXX-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

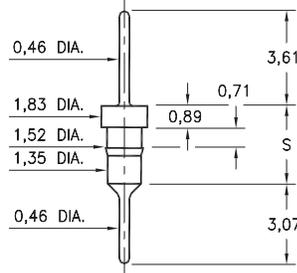


Basic Part Number	Length K
1752-0	0,51
6458-0	0,89

### 3413/8404

X4XX-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

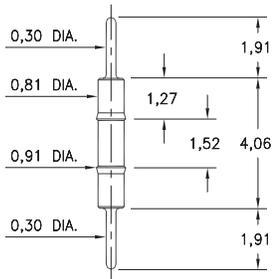


Basic Part Number	Length S
3413-0	3,0
8404-0	3,33

### 9075

9075-0-00-XX-00-00-03-0

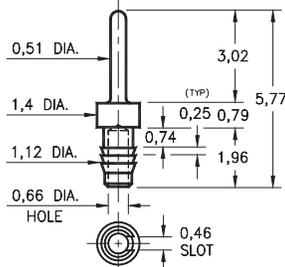
Press-fit in 0,86 mounting hole



### 2617

2617-0-01-XX-00-00-03-0

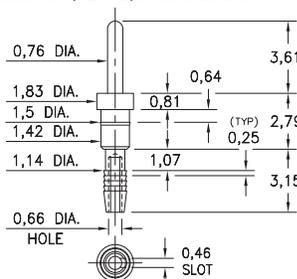
Compliant press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board



### 5607

5607-0-01-XX-00-00-03-0

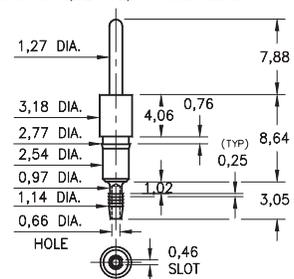
Compliant press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board



### 8995

8995-0-01-XX-00-00-03-0

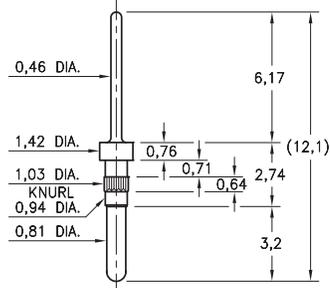
Compliant press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board



### 5065

5065-0-00-26-00-00-03-0

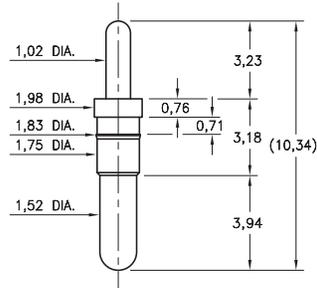
Press-fit in 0,94 mounting hole



### 3501

3501-0-00-15-00-00-03-0

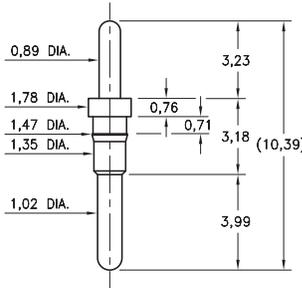
Press-fit in 1,78 mounting hole



### 3502

3502-0-00-15-00-00-03-0

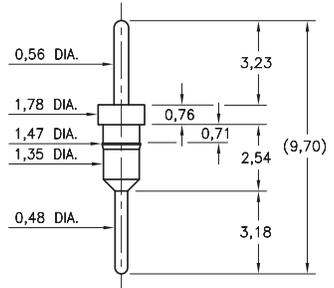
Press-fit in 1,42 mounting hole



### 3503

3503-0-00-15-00-00-03-0

Press-fit in 1,42 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



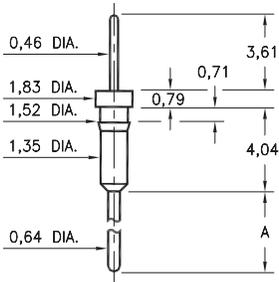
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3409

3409-X-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

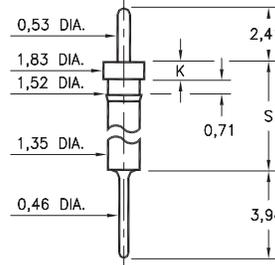


Basic Part Number	Pin Length A
3409-1	5,33
3409-2	10,67

### 0315

0315-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole  
Pin material is Phosphor Bronze 544 (B2)

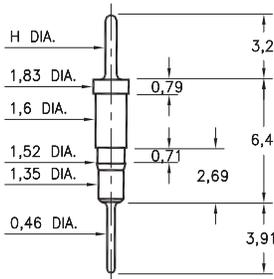


Basic Part Number	Head Height K	Standoff Height S
0315-0	0,76	4,83
0315-1	1,02	10,92

### 5503/5509

550X-X-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

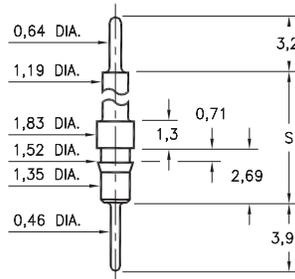


Basic Part Number	Pin Diameter H
5503-0	0,64
5509-0	0,46

### 5504/5505

550X-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

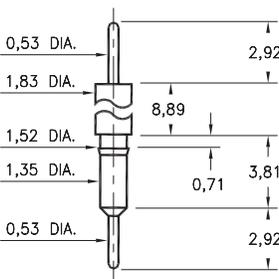


Basic Part Number	Standoff Height S
5504-0	8,41
5505-0	15,39

### 3406

3406-0-00-XX-00-00-03-0

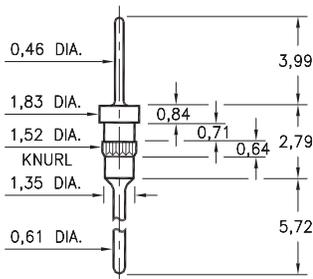
Press-fit in 1,45 mounting hole



### 5011

5011-0-00-XX-00-00-03-0

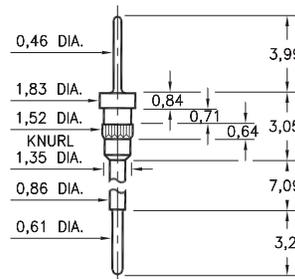
Press-fit in 1,45 mounting hole



### 5113

5113-0-00-XX-00-00-03-0

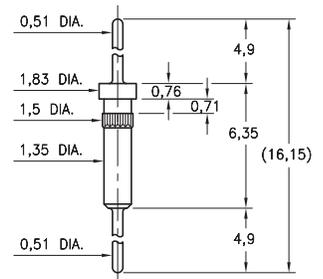
Press-fit in 1,45 mounting hole



### 3900

3900-0-00-15-00-00-03-0

Press-fit in 1,45 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



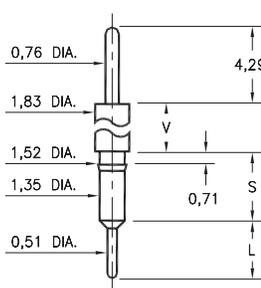
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3400 ⇨ 3402/3405/3410

34XX-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

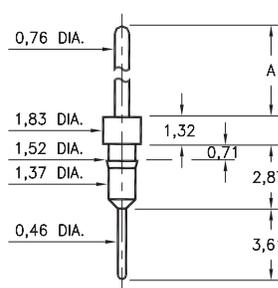


Basic Part Number	Shoulder Height V	Length S	Length L
3402-0	1,32	3,51	2,92
3401-0	2,54	3,45	2,92
3405-0	4,29	3,71	2,92
3400-0	11,71	3,68	2,92
3410-0	23,72	3,45	3,15

### 3411

3411-X-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

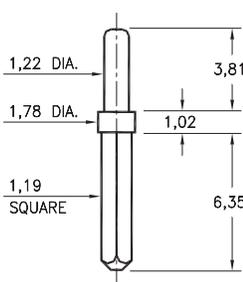


Basic Part Number	Pin Length A
3411-0	10,59
3411-1	5,51

### 0600

0600-0-05-XX-00-00-01-0

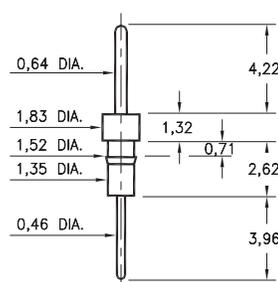
Solder mount 1,32 mounting hole



### 0290

0290-0-00-XX-00-00-03-0

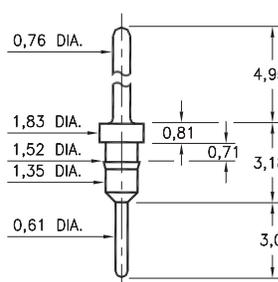
Press-fit in 1,45 mounting hole



### 7007

7007-0-00-XX-00-00-03-0

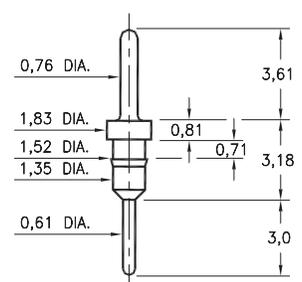
Press-fit in 1,45 mounting hole



### 5016

5016-0-00-XX-00-00-03-0

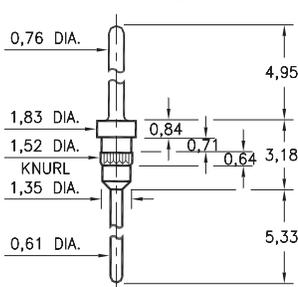
Press-fit in 1,45 mounting hole



### 5005

5005-0-00-XX-00-00-03-0

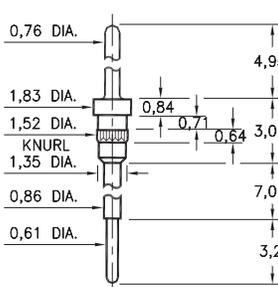
Press-fit in 1,45 mounting hole



### 5107

5107-0-00-XX-00-00-03-0

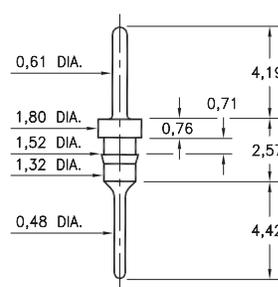
Press-fit in 1,45 mounting hole



### 8919

8919-0-00-XX-00-00-03-0

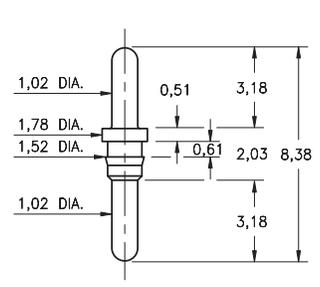
Press-fit in 1,45 mounting hole



### 3077

3077-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



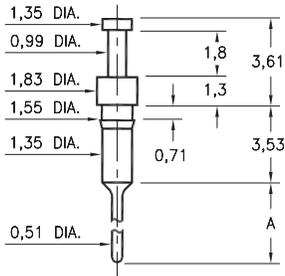
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3408

3408-X-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

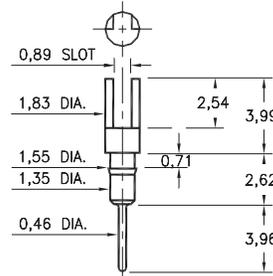


Basic Part Number	Pin Length A
3408-1	3,07
3408-2	4,60

### 0270/0282

02XX-0-01-XX-00-00-03-0

Press-fit in 1,45 mounting hole

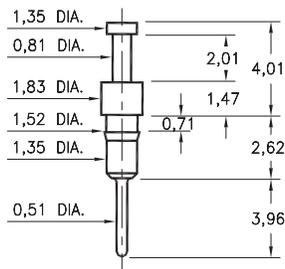


Basic Part Number	Pin Material
0270-0	Phosphor Bronze 544
0282-0	Brass 360

### 0700

0700-0-00-XX-00-00-03-0

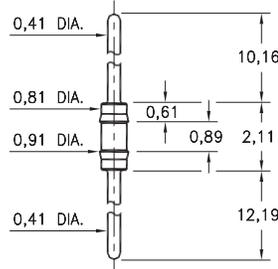
Press-fit in 1,45 mounting hole



### 8006

8006-0-00-XX-00-00-03-0

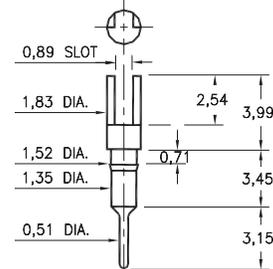
Press-fit in 0,86 mounting hole



### 0265

0265-0-01-XX-00-00-03-0

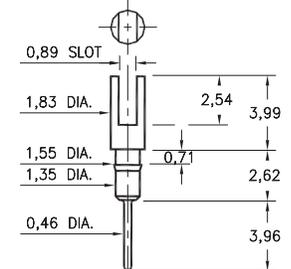
Press-fit in 1,45 mounting hole



### 0272

0272-0-01-XX-00-00-03-0

Press-fit in 1,45 mounting hole

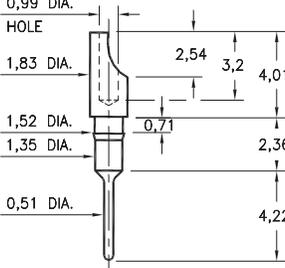


### 8000

8000-0-01-XX-00-00-03-0

Press-fit in 1,45 mounting hole

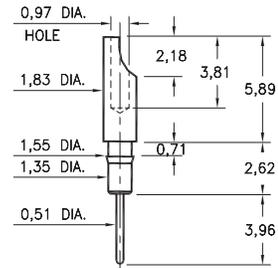
For wire sizes up to 22 AWG



### 0275

0275-0-01-XX-00-00-03-0

Press-fit in 1,45 mounting hole  
Pin material is Phosphor Bronze 544 (B2)  
For wire sizes up to 22 AWG

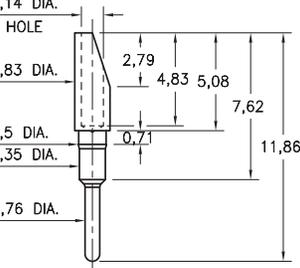


### 1107

1107-0-01-15-00-00-03-0

Press-fit in 1,45 mounting hole

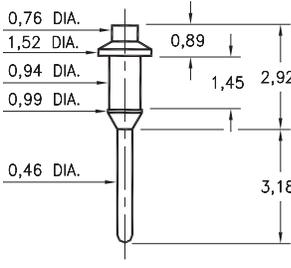
For wire sizes up to 20 AWG



### 9976

9976-0-00-XX-00-00-03-0

Press-fit in 0,97 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



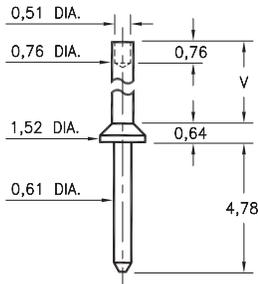
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3117

3117-X-00-XX-00-00-08-0

Swage mount in 0,89 hole

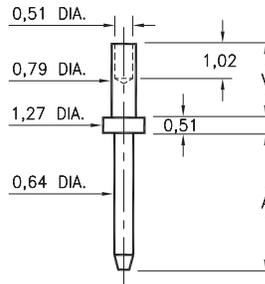


Basic Part Number	Board Thickness	Length V
3117-1	0,79	1,19
3117-2	1,57	1,98
3117-3	2,39	2,79
3117-4	3,18	3,58

### 3114/3115

311X-X-00-XX-00-00-08-0

Swage mount in 0,89 mounting hole

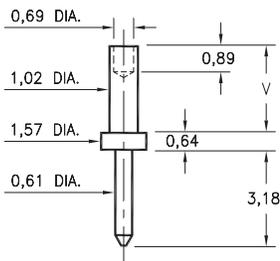


Basic Part Number	Board Thickness	Length A	Length V
3114-1	0,79	3,81	1,30
3114-2	1,57	3,81	2,08
3115-1	0,79	7,62	1,30
3115-2	1,57	7,62	2,08

### 3112

3112-X-00-XX-00-00-08-0

Swage mount in 1,09 hole

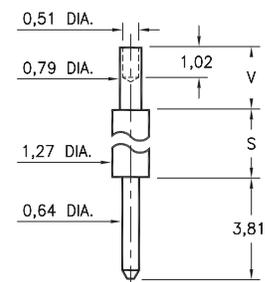


Basic Part Number	Board Thickness	Length V
3112-1	0,79	1,30
3112-2	1,57	2,08
3112-3	2,39	2,87

### 3118/3119

311X-X-00-XX-00-00-08-0

Swage mount in 0,89 hole

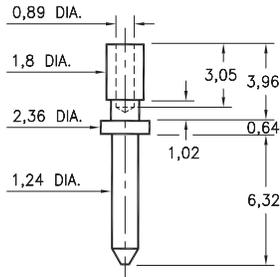


Basic Part Number	Board Thickness	Length S	Length V
3118-1	0,79	4,32	1,30
3118-2	1,57	4,32	2,08
3119-1	0,79	10,67	1,30
3119-2	1,57	10,67	2,08

### 3139

3139-0-00-XX-00-00-08-0

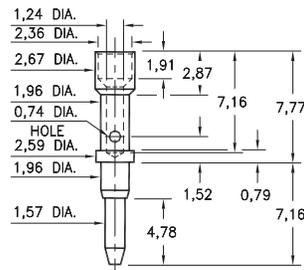
Wire crimp termination. Accepts wire sizes 24 AWG Max. / 28 AWG Min.



### 3602

3602-0-07-XX-00-00-08-0

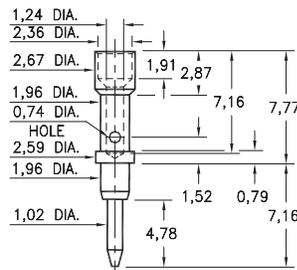
Annealed  
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



### 3603

3603-0-07-XX-00-00-08-0

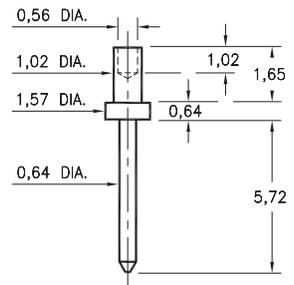
Annealed  
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



### 3131

3131-1-00-XX-00-00-08-0

Swage mount in 1,09 hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



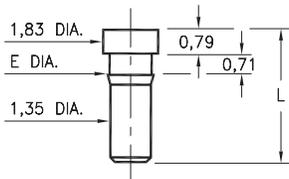
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 0259/0286/1941

XXXX-0-00-XX-00-00-03-0

Press-fit in 1,45/1,5 mounting hole



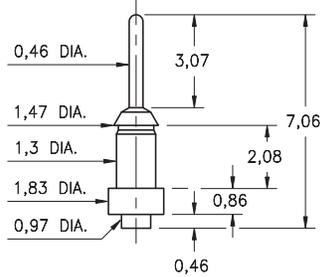
Basic Part Number	Length L	Barb Dia. E	Mounting Hole
0259-0	4,39	1,57	1,5
0286-0	2,92	1,52	1,45
*1941-0	4,29	1,47	1,42

\* Flat face Target contact

### 2956-0

2956-0-00-XX-00-00-03-0

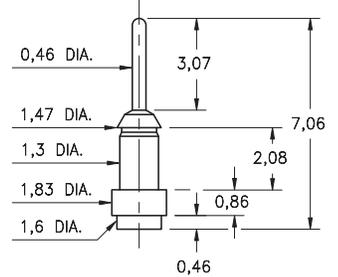
Surface mount



### 2956-1

2956-1-00-XX-00-00-03-0

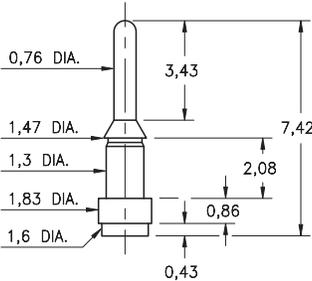
Surface mount



### 4956-1

4956-1-00-XX-00-00-33-0

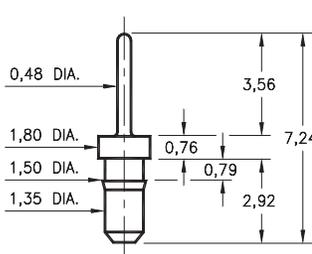
Surface mount



### 8876

8876-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

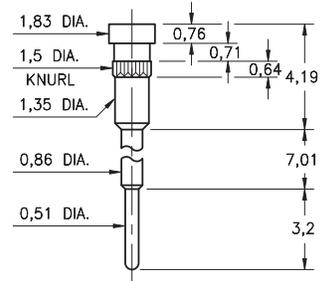


### 1938

1938-0-00-XX-00-00-03-0

Flat face Target contact, solder Tail

Press-fit in 1,45 mounting hole

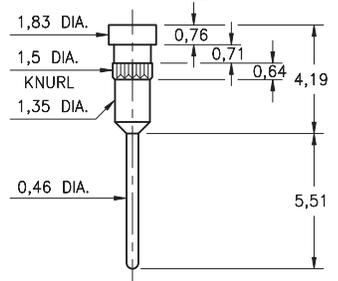


### 1940

1940-0-00-XX-00-00-03-0

Flat face Target contact, solder Tail

Press-fit in 1,45 mounting hole

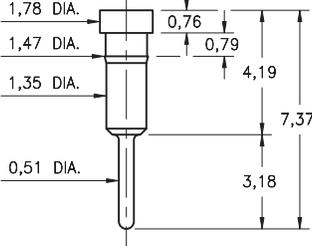


### 1942

1942-0-00-XX-00-00-03-0

Flat face Target contact, solder Tail

Press-fit in 1,42 mounting hole

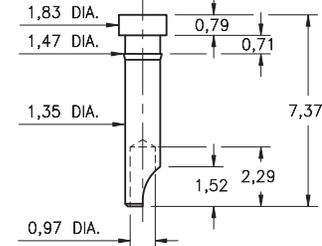


### 3024

3024-0-01-XX-00-00-03-0

Flat face Target contact, solder cup

Press-fit in 1,42 mounting hole

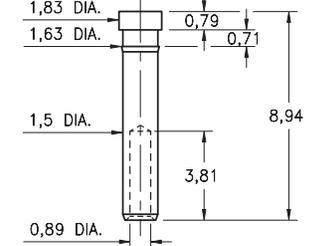


### 3000

3000-0-00-XX-00-00-03-0

Flat face Target contact, wire termination

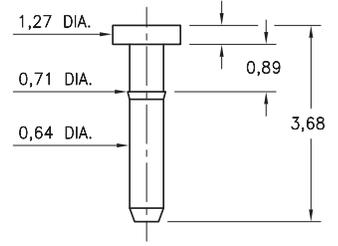
Press-fit in 1,55 mounting hole. Accepts wire sizes 24 AWG Max. / 28 AWG Min.



### 6430

6430-0-00-XX-00-00-03-0

Press-fit in 0,64 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: **XXXX - X - 0X - XX - 00 - 00 - XX - 0**

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



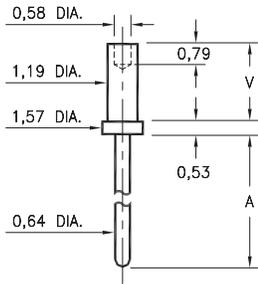
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3130/3134

31XX-X-00-XX-00-00-08-0

Swage mount in 1,32 hole

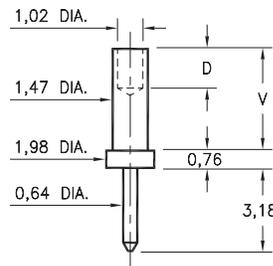


Basic Part Number	Board Thickness	Length A	Length V
3134-1	0,79	2,01	1,30
3134-2	1,57	2,01	2,08
3134-3	2,39	2,01	2,87
3134-4	3,18	2,01	3,68
3130-1	0,79	4,55	1,30
3130-2	1,57	4,55	2,08
3130-3	2,39	4,55	2,87
3130-4	3,18	4,55	3,68

### 3113

3113-X-00-XX-00-00-08-0

Swage mount in 1,57 hole

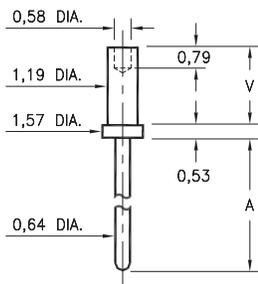


Basic Part Number	Board Thickness	Length V	Depth D
3113-1	0,79	1,57	1,02
3113-2	1,57	2,39	1,57
3113-3	2,39	3,18	1,57
3113-4	3,18	3,96	1,57

### 3151

3151-X-00-XX-00-00-08-0

Swage mount in 1,32 hole



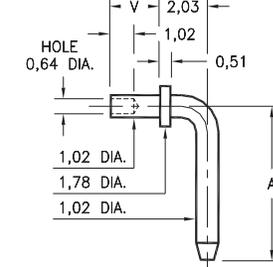
Basic Part Number	Board Thickness	Length A	Length V
3151-1	0,79	12,17	1,30
3151-2	1,57	12,17	2,08
3151-3	2,39	12,17	2,87
3151-4	3,18	12,17	3,68

### 3301 ⇌ 3304

330X-X-14-XX-00-00-08-0

Specify board thickness

Swage mount in 1,09 hole



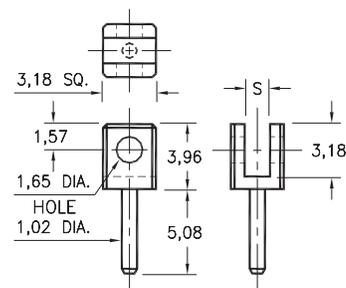
Basic Part Number	Pin Centers A
3301-X	6,53
3302-X	9,07
3303-X	9,53
3304-X	14,27

- X -	Board Thickness	Length V
1	0,79	1,30
2	1,57	2,08
3	2,39	2,87

### 3620

3620-X-32-XX-00-00-08-0

Board edge rivet mount.

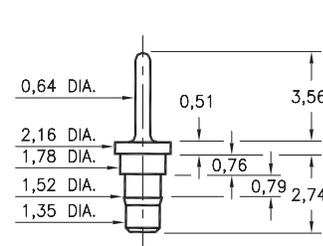


Basic Part Number	Board Thickness	Slot S
3620-1	0,79	1,19
3620-2	1,57	1,91

### 0940

0940-0-00-XX-00-00-03-0

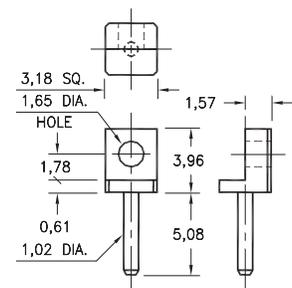
Press-fit in 1,45 mounting hole



### 3621

3621-0-32-XX-00-00-08-0

Board edge rivet mount



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



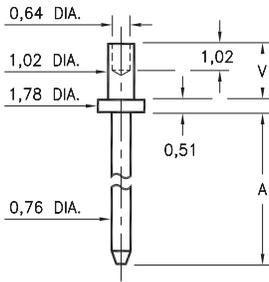
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3110/3111

311X-X-00-XX-00-00-08-0

Swage mount in 1,09 hole

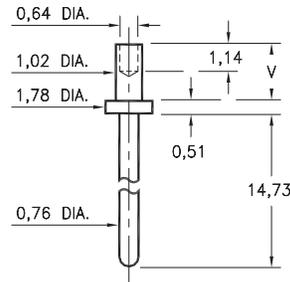


Basic Part Number	Board Thickness	Length A	Length V
3110-1	0,79	3,81	1,30
3110-2	1,57	3,81	2,08
3110-3	2,39	3,81	2,87
3111-1	0,79	7,62	1,30
3111-2	1,57	7,62	2,08
3111-3	2,39	7,62	2,87

### 3150

3150-X-00-XX-00-00-08-0

Swage mount in 1,09 mounting hole

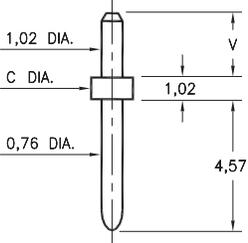


Basic Part Number	Board Thickness	Length V
3150-1	0,79	1,30
3150-2	1,57	2,08

### 3136/3137

313X-X-00-XX-00-00-08-0

Solder mount in 1,09 mounting hole  
3137-1 is available on 16mm wide carrier tape: 580 parts per 330mm reel.  
See page 224.1 for Tape & Reel details

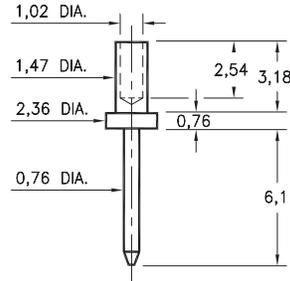


Basic Part Number	Board Thickness	Length V	Flange Dia. C
3136-1	1,57	2,08	
3136-2	2,39	2,79	1,98
3136-3	3,18	3,68	
3137-1	1,57	2,08	1,57
3137-2	2,39	2,79	
3137-3	3,18	3,68	
3137-4	3,96	4,70	

### 3148

3148-3-00-XX-00-00-08-0

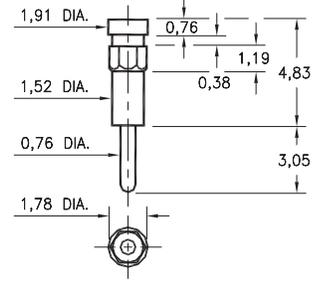
Swage mount in 1,57 hole  
For a 2,39 thick board



### 8815

8815-0-00-XX-00-00-03-0

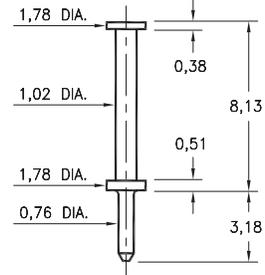
Hex press-fit in 1,68 plated through-hole



### 6821

6821-0-00-XX-00-00-08-0

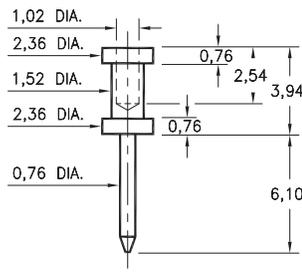
Turret terminal pin



### 3132

3132-0-00-XX-00-00-08-0

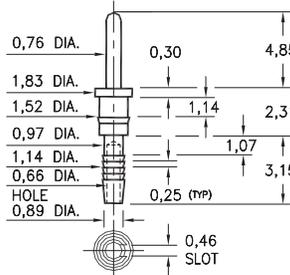
Wire crimp termination, Annealed  
Accepts wire sizes 22 AWG Max. / 24 AWG Min.



### 5601

5601-0-01-XX-00-00-03-0

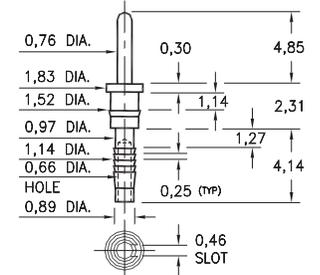
Compliant press-fit in 1,02 ± 0,08 plated through-hole. For 1,52 → 2,54 thick board



### 5602

5602-0-01-XX-00-00-03-0

Compliant press-fit in 1,02 ± 0,08 plated through-hole. For 2,29 → 3,30 thick board



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



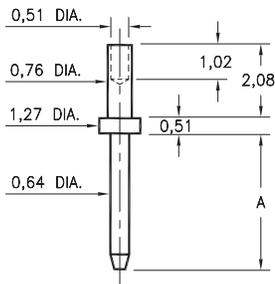
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3120

3120-X-00-XX-00-00-08-0

Swage mount in 0,86 hole

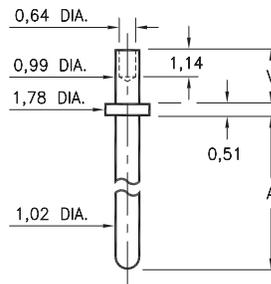


Basic Part Number	Pin Length A
3120-1	5,21
3120-2	6,35

### 3122⇔3153

31XX-X-00-XX-00-00-08-0

Swage mount in 1,09 hole



Basic Part Number	Pin Length A
3153-X	4,57
3141-X	5,84
3122-X	7,11
3149-X	9,65
3123-X	14,73
3140-X	19,81
3124-X	22,35

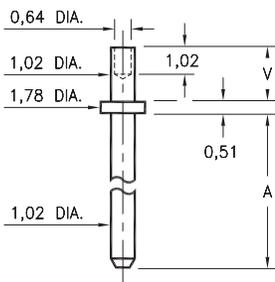
  

-X-	Board Thickness	Length V
1	0,79	1,3
2	1,57	2,08

### 3101⇔3106

310X-X-00-XX-00-00-08-0

Swage mount in 1,09 hole



Basic Part Number	Pin Length A
3101-X	3,81
3102-X	4,78
3103-X	7,62
3104-X	12,7
3105-X	19,05
3106-X	25,40

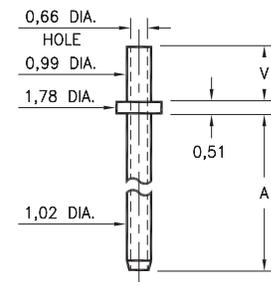
  

-X-	Board Thickness	Length V
1	0,79	1,30
2	1,57	2,08
3	2,39	2,87

### 3221⇔3223

322X-0-00-XX-00-00-08-0

Swage mount in 1,09 hole



Basic Part Number	Pin Length A
3221-X	2,54
3222-X	3,81
3223-X	7,62

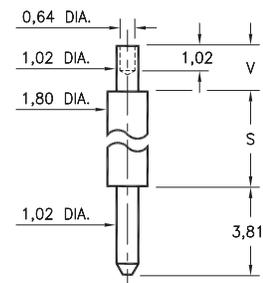
  

-X-	Board Thickness	Length V
1	0,79	1,30
2	1,57	2,08
3	2,39	2,87

### 3125/3126

312X-X-00-XX-00-00-08-0

Swage mount in 1,09 hole



Basic Part Number	Pin Length S
3125-X	4,32
3126-X	10,67

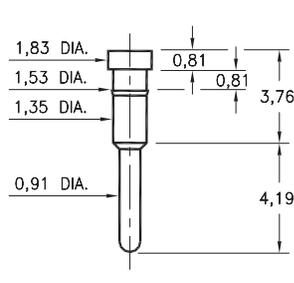
  

-X-	Board Thickness	Length V
1	0,79	1,30
2	1,57	2,08
3	2,39	2,87

### 0995

0995-0-00-XX-00-00-03-0

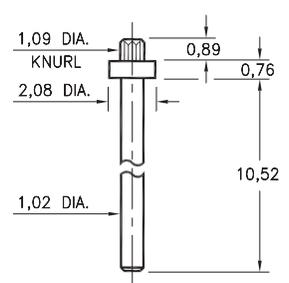
Press-fit in 1,45 mounting hole



### 4526

4526-0-00-XX-00-00-03-0

Press-fit in 1,02 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



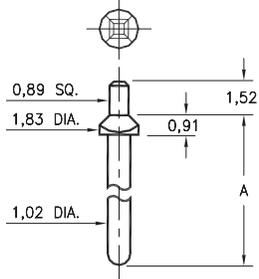
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 8600/8954/8955

8XXX-X-05-XX-00-00-03-0

Square press-fit in 1,09 plated through-hole

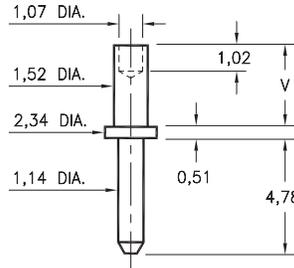


Basic Part Number	Pin Length A
8600-0	10,16
8600-1	21,59
8600-2	30,48
8954-0	3,45
8955-0	16,64

### 3159

3159-X-00-XX-00-00-08-0

Swage mount in 1,63 hole

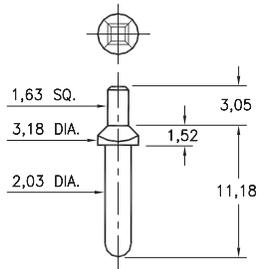


Basic Part Number	Board Thickness	Length V
3159-1	0,79	1,57
3159-2	1,57	2,39
3159-3	2,39	3,18
3159-4	3,18	3,96

### 8952

8952-0-05-XX-00-00-03-0

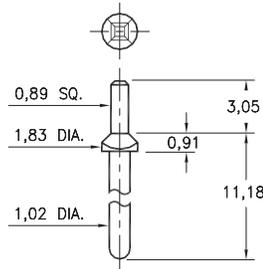
Square press-fit in 2,21 plated through-hole



### 8953

8953-0-05-XX-00-00-03-0

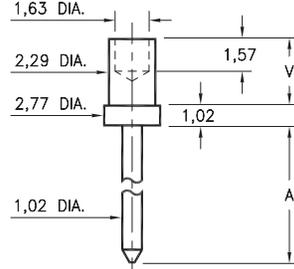
Square press-fit in 1,19 plated through-hole



### 3230

3230-X-00-XX-00-00-08-0

Swage mount in 2,39 hole



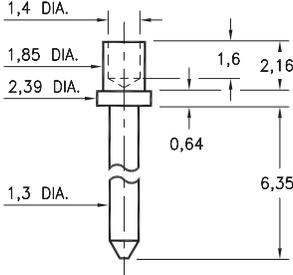
Basic Part Number	Board Thickness	Length A	Length V
3230-1	0,79	5,13	1,65
3230-2	1,57	5,79	2,41
3230-3	2,39	6,55	3,18
3230-4	3,18	7,32	3,94

### 3146

3146-2-00-XX-00-00-08-0

Swage mount in 1,93 hole

For a 1,57 thick board

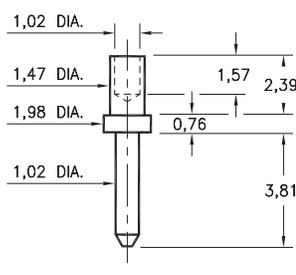


### 3142

3142-2-00-XX-00-00-08-0

Swage mount in 1,57 hole

For a 1,57 thick board

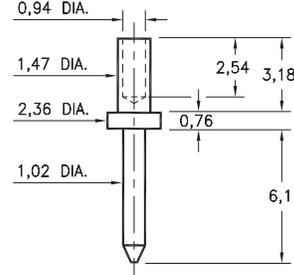


### 3232

3232-3-00-XX-00-00-08-0

Swage mount in 1,57 hole

For a 2,39 thick board

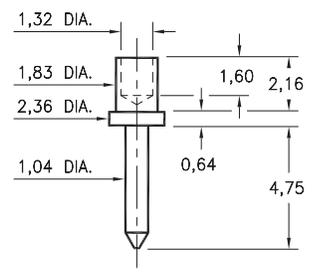


### 3145

3145-2-00-XX-00-00-08-0

Swage mount in 1,93 hole

For a 1,57 thick board



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



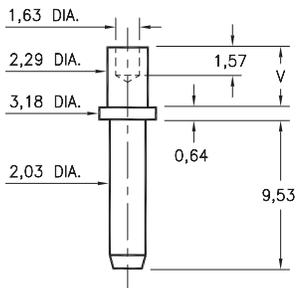
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3231

3231-X-00-XX-00-00-08-0

Swage mount in 2,39 hole

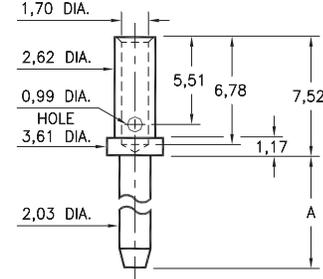


Basic Part Number	Board Thickness	Length V
3231-2	1,57	2,39
3231-3	2,39	3,18
3231-4	3,18	3,96

### 3609

3609-X-07-XX-00-00-08-0

Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.

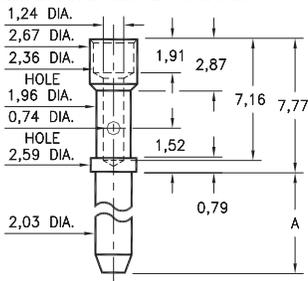


Basic Part Number	Pin Length A
3609-1	5,08
3609-2	9,53
3609-3	12,7

### 3601

3601-X-07-XX-00-00-08-0

Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.

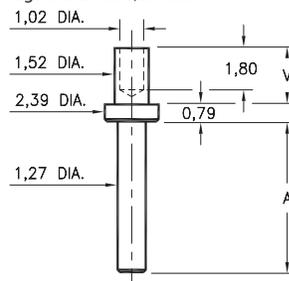


Basic Part Number	Pin Length A
3601-1	5,08
3601-2	9,53
3601-3	12,7

### 3133/3138/3152

31XX-X-00-XX-00-00-08-0

Specify board thickness  
Swage mount in 1,63 hole



Basic Part Number	Pin Length A
3152-X	2,39
3133-X	5,56
3138-X	7,16

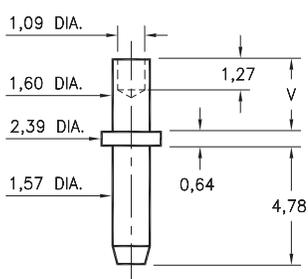
  

- X -	Board Thickness	Length V
1	0,79	1,60
2	1,57	2,39
3	2,39	3,18
4	3,18	3,96

### 3144

3144-X-00-XX-00-00-08-0

Swage mount in 1,70 hole

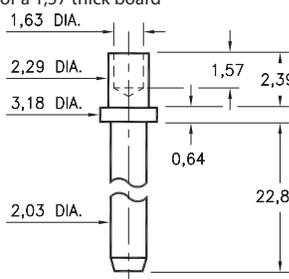


Basic Part Number	Board Thickness	Length V
3144-1	0,79	1,35
3144-2	1,57	2,13
3144-3	2,39	2,92

### 3233

3233-2-00-XX-00-00-08-0

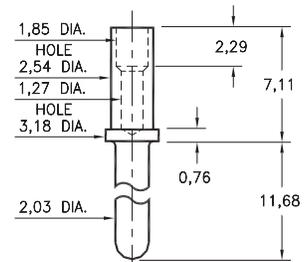
Swage mount in 2,39 hole  
For a 1,57 thick board



### 0520

0520-0-00-XX-00-00-03-0

Annealed  
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



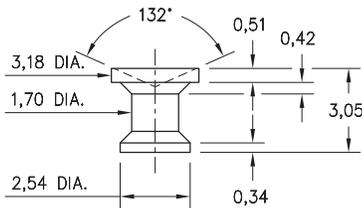
# MALE PCB PINS

## PRINTED CIRCUIT PINS

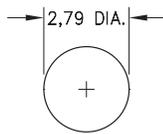
### 1943

1943-0-00-15-00-00-03-0

Concave face Target contact, surface mount  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel.  
See page 224.2 for Tape & Reel details



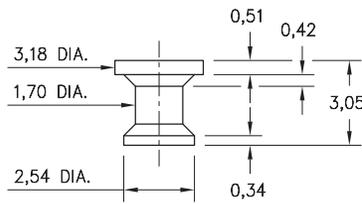
P.C.B. Layout



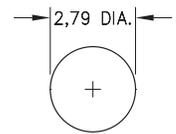
### 1944

1944-0-00-15-00-00-03-0

Flat face Target contact, surface mount  
Also available on 16mm wide carrier tape:  
2,200 parts per 330mm reel.  
See page 224.2 for Tape & Reel details



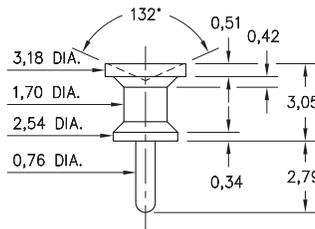
P.C.B. Layout



### 1945

1945-0-00-15-00-00-03-0

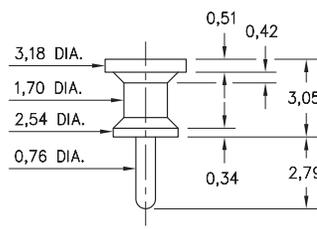
Concave face Target contact, Solder Tail



### 1946

1946-0-00-15-00-00-03-0

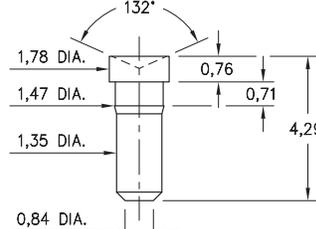
Flat face Target contact, Solder Tail



### 1947

1947-0-00-15-00-00-03-0

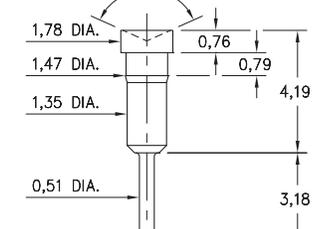
Concave face Target contact, surface mount  
Press-fit in 1,42 mounting hole



### 1948

1948-0-00-15-00-00-03-0

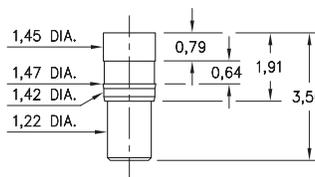
Concave face Target contact, Solder Tail  
Press-fit in 1,42 mounting hole



### 1949

1949-0-00-15-00-00-03-0

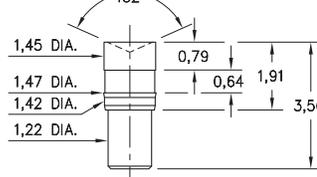
Flat face Target contact, surface mount  
Press-fit in 1,42 mounting hole



### 1950

1950-0-00-15-00-00-03-0

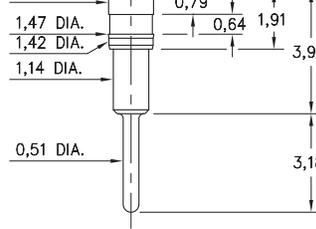
Concave face Target contact, surface mount  
Press-fit in 1,42 mounting hole



### 1951

1951-0-00-15-00-00-03-0

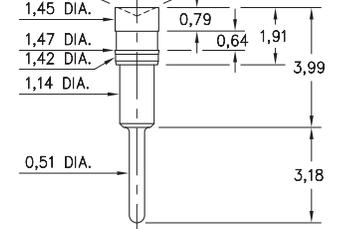
Flat face Target contact, Solder Tail  
Press-fit in 1,42 mounting hole



### 1952

1952-0-00-15-00-00-03-0

Concave face Target contact, Solder Tail  
Press-fit in 1,42 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: 194X - 0 - 00 - 15 - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)



# MALE PCB PINS

## PRINTED CIRCUIT PINS

<p><b>1958</b> 1958-0-00-15-00-00-03-0 Concave face Target contact, solder Tail Press-fit in 1,45 mounting hole</p>	<p><b>1960</b> 1960-0-00-15-00-00-03-0 Concave face Target contact, solder Tail Press-fit in 1,45 mounting hole</p>	<p><b>1831</b> 1831-1-00-15-00-00-03-0 Concave face Target contact, solder Tail Hex press-fit in 0,86 mounting hole</p>	<p><b>1931</b> 1931-1-00-15-00-00-03-0 Flat face Target contact, solder Tail Hex press-fit in 0,86 mounting hole</p>
<p><b>1953</b> 1953-0-00-XX-00-00-03-0 Flat face Target contact, surface mount Press-fit in 1,42 mounting hole</p>	<p><b>1954</b> 1954-0-00-XX-00-00-03-0 Flat face Target contact, surface mount Press-fit in 1,42 mounting hole</p>	<p><b>1955</b> 1955-0-00-15-00-00-03-0 Concave face Target contact, surface mount Press-fit in 1,42 mounting hole</p>	<p><b>1957</b> 1957-0-00-15-00-00-03-0 Concave face Target contact, surface mount Press-fit in 1,42 mounting hole</p>
<p><b>1933</b> 1933-0-00-XX-00-00-03-0 Flat face Target contact, solder Tail Press-fit in 0,86 mounting hole</p>	<p><b>1935</b> 1935-0-00-XX-00-00-03-0 Flat face Target contact, surface mount Press-fit in 0,86 mounting hole</p>	<p><b>1934</b> 1934-0-00-15-00-00-03-0 Concave face Target contact, solder Tail Press-fit in 0,86 mounting hole</p>	<p><b>1936</b> 1936-0-00-15-00-00-03-0 Concave face Target contact, surface mount Press-fit in 0,86 mounting hole</p>

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - 0 - 00 - XX - 00 - 00 - 03 - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



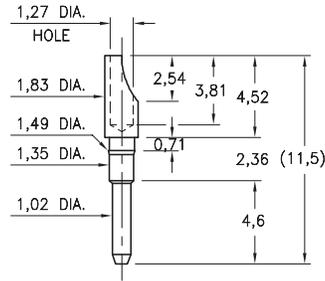
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 1140

1140-0-01-XX-00-00-03-0

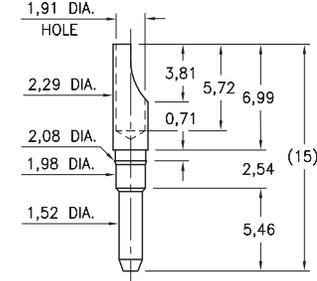
Press-fit in 1,45 mounting hole  
For wire sizes up to 20 AWG



### 1160

1160-0-01-XX-00-00-03-0

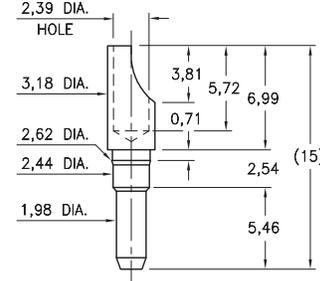
Press-fit in 2,03 mounting hole  
For wire sizes up to 16 AWG



### 1178

1178-0-01-XX-00-00-03-0

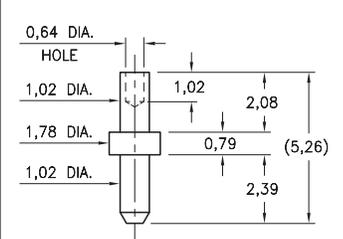
Press-fit in 2,54 mounting hole  
For wire sizes up to 14 AWG



### 4658

4658-0-00-XX-00-00-08-0

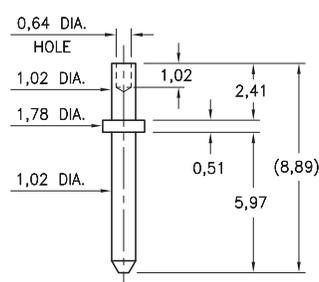
Swage mount 1,09 mounting hole



### 4275

4275-0-00-XX-00-00-08-0

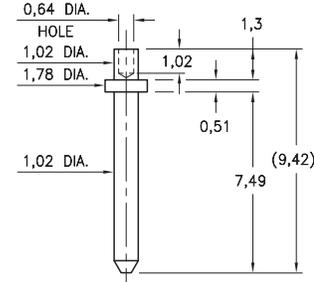
Swage mount 1,09 mounting hole



### 9103

9103-0-00-XX-00-00-08-0

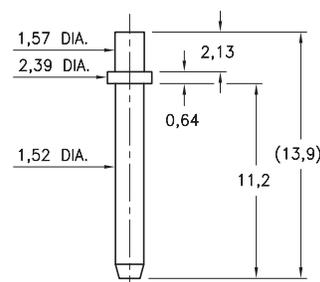
Swage mount 1,09 mounting hole



### 4357

4357-0-00-XX-00-00-03-0

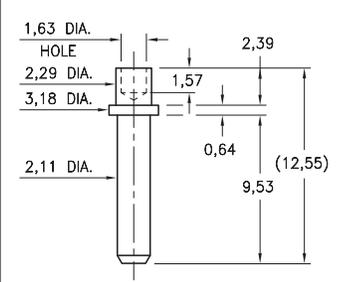
Solder mount 1,63 mounting hole



### 9242

9242-0-00-XX-00-00-08-0

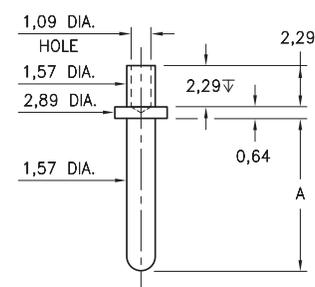
Swage mount 2,39 mounting hole



### 4639/4717

4XXX-0-00-XX-00-00-08-0

Swage mount 1,65 mounting hole

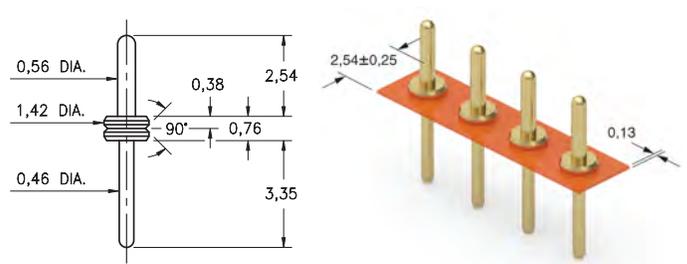


Basic Part Number	Pin Length A
4639-0	10,97
4717-0	8,43

### 3169

3169-0-61-15-00-00-03-0

Pins are mounted on a removable Kapton tape carrier at 2,54 pitch.  
Packaged on continuous strip spools of 1,000 pins.  
(Contact distributors for other order quantity options.)



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - 0 - 00 - XX - 00 - 00 - 03 - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



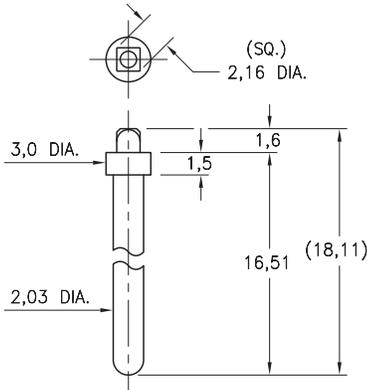
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 5920

5920-0-00-XX-00-00-03-0

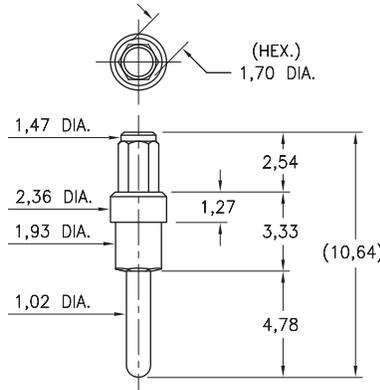
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: 2,18mm (.086")



### 6025

6025-0-00-XX-00-00-03-0

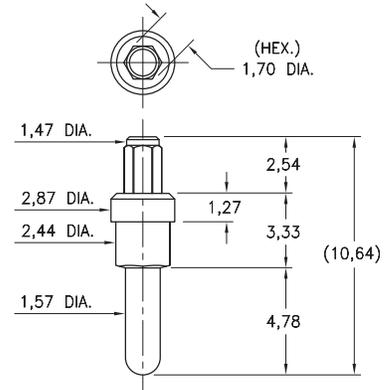
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: 1,73mm (.068")



### 6035

6035-0-00-XX-00-00-03-0

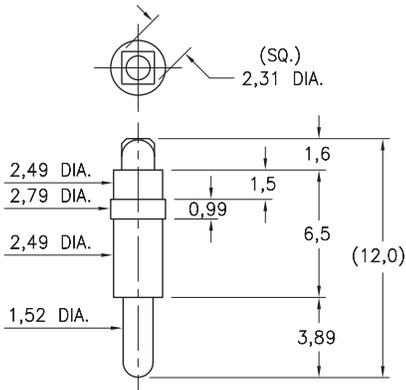
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: 1,73mm (.068")



### 8237

8237-0-05-XX-00-00-03-0

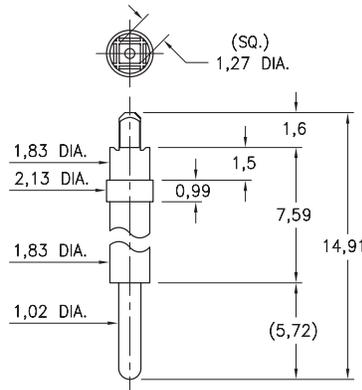
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: 2,34mm (.092")



### 6834

6834-0-00-XX-00-00-03-0

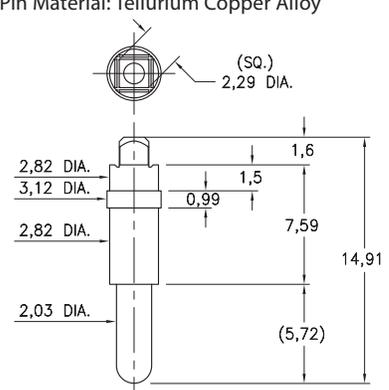
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: 1,3mm (.0512")



### 6835

6835-0-00-XX-00-00-44-0

Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: 2,34mm (.092")  
\* Pin Material: Tellurium Copper Alloy



Recommended drilled hole sizes are prior to plating of the PCB and based on typical copper deposition of .5 - 1 oz. This results in a reduction of hole size by approximately 0,038 - 0,076. Depending on surface plating, typical finished hole sizes are 0,076 - 0,127 smaller than drilled hole sizes. The finished hole size tolerance for press-fit applications should be specified as +/- 0,051

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted) \*

**Dimensions:** Inches

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE:** XXXX - 0 - 0X - XX - 00 - 00 - XX - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



# MALE PCB PINS

## PRINTED CIRCUIT PINS

<p><b>1959-0</b> 1959-0-00-15-00-00-03-0 Flat face Target contact, surface mount Press-fit in 2,49 mounting hole</p>	<p><b>1959-1</b> 1959-1-00-15-00-00-03-0 Concave face Target contact, surface mount Press-fit in 2,49 mounting hole</p>	<p><b>1969-0</b> 1969-0-00-15-00-00-03-0 Flat face Target contact, solder Tail Press-fit in 2,49 mounting hole</p>	<p><b>1969-1</b> 1969-1-00-15-00-00-03-0 Concave face Target contact, solder Tail Press-fit in 2,49 mounting hole</p>						
<p><b>1968-0</b> 1968-0-00-15-00-00-03-0 Flat face Target contact, Press-fit in 2,46 mounting hole. For wire sizes up to 16AWG</p>	<p><b>1968-1</b> 1968-1-00-15-00-00-03-0 Concave face Target contact, Press-fit in 2,46 mounting hole. For wire sizes up to 16AWG</p>	<p><b>3078</b> 3078-X-00-15-00-00-03-0 Press-fit in 1,45 mounting hole For wire sizes up to 22 AWG</p> <table border="1" data-bbox="1218 924 1429 1092"> <thead> <tr> <th>Basic Part Number</th> <th>Pin Length A</th> </tr> </thead> <tbody> <tr> <td>3078-0</td> <td>3,68</td> </tr> <tr> <td>3078-1</td> <td>5,21</td> </tr> </tbody> </table>		Basic Part Number	Pin Length A	3078-0	3,68	3078-1	5,21
Basic Part Number	Pin Length A								
3078-0	3,68								
3078-1	5,21								

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Annealed)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - 0 - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



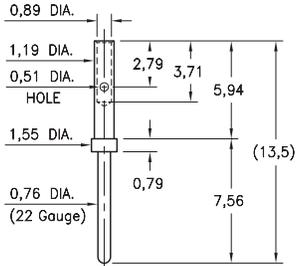
# MALE PCB PINS

## CRIMP PINS FOR 12-28 AWG WIRE

### 3922

**3922-0-01-XX-00-00-08-0**

Wire crimp termination. Accepts wire sizes 22 AWG Max. / 28 AWG Min.

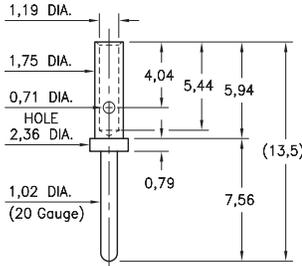


Dimensions per M39029/58-360

### 3920

**3920-0-01-XX-00-00-08-0**

Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.

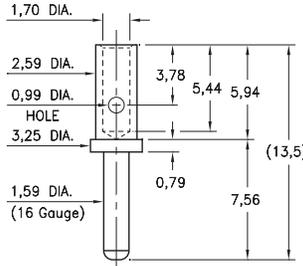


Dimensions per M39029/58-363

### 3916

**3916-0-01-XX-00-00-08-0**

Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.

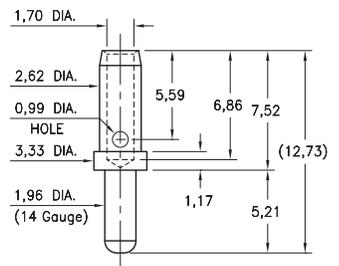


Dimensions per M39029/58-364

### 3914

**3914-0-01-XX-00-00-08-0**

Wire crimp termination. Accepts wire sizes 14 AWG Max. / 16 AWG Min.

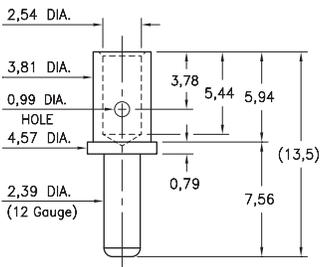


Dimensions per M39029/1-102

### 3912

**3912-0-01-XX-00-00-08-0**

Wire crimp termination. Accepts wire sizes 12 AWG Max. / 14 AWG Min.



Dimensions per M39029/58-365

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Annealed)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** 39XX - X - 01 - XX - 00 - 00 - 08 - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



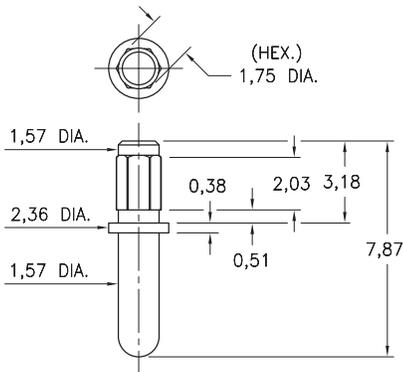
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 3975

#### 3975-0-00-XX-00-00-03-0

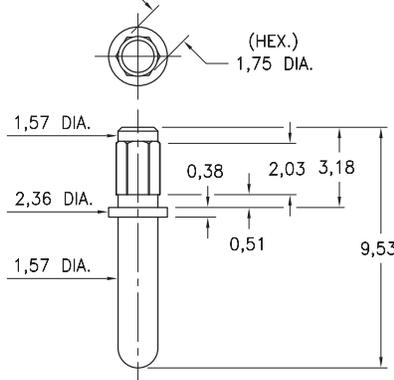
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,78mm) .070"



### 3977

#### 3977-0-00-XX-00-00-03-0

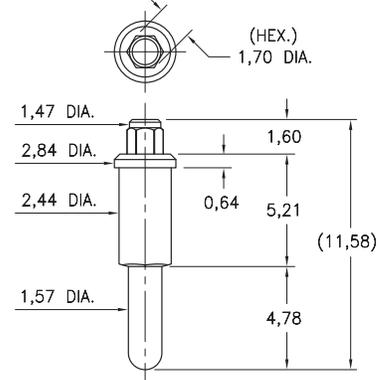
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,78mm) .070"



### 4427

#### 4427-0-00-XX-00-00-03-0

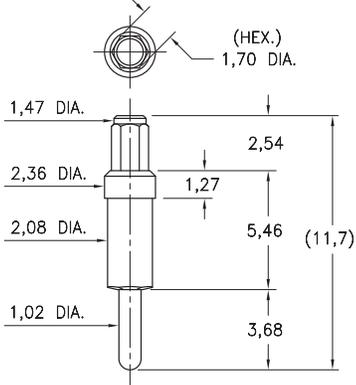
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,73mm) .068"



### 7504

#### 7504-0-00-XX-00-00-03-0

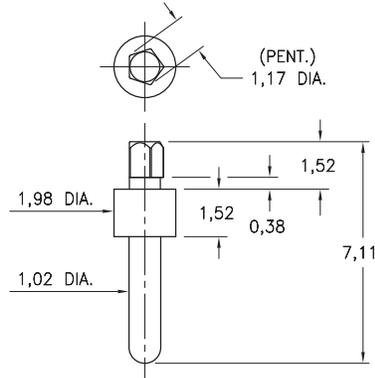
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,73mm) .068"



### 9003

#### 9003-0-00-XX-00-00-03-0

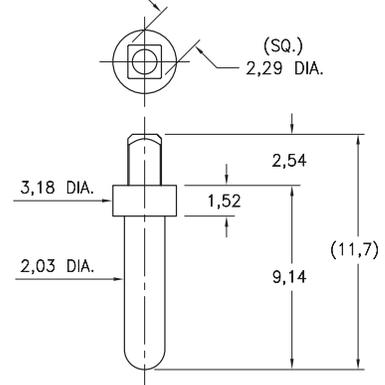
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,19mm) .047"



### 6955

#### 6955-0-05-XX-00-00-03-0

Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (2,31mm) .091"



Recommended drilled hole sizes are prior to plating of the PCB and based on typical copper deposition of .5 - 1 oz. This results in a reduction of hole size by approximately 0,038 - 0,076. Depending on surface plating, typical finished hole sizes are 0,076 - 0,127 smaller than drilled hole sizes. The finished hole size tolerance for press-fit applications should be specified as +/- 0,051

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
( Except where noted ) \*

**Dimensions:** Inches

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



**ORDER CODE:** XXXX - 0 - 0X - XX - 00 - 00 - XX - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)



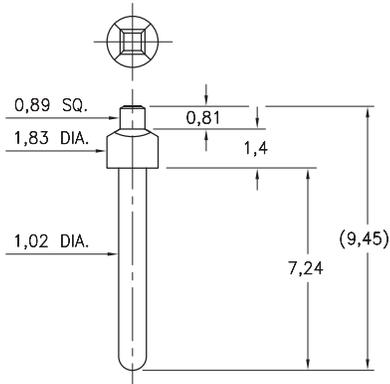
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 1655

1655-0-00-XX-00-00-03-0

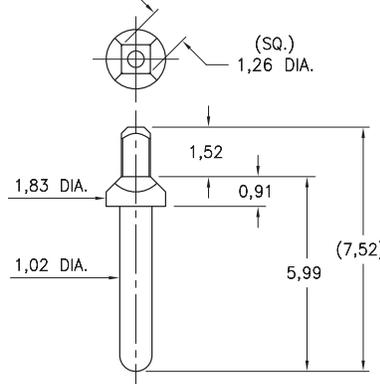
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,28mm) .0505"



### 4219

4219-0-05-XX-00-00-03-0

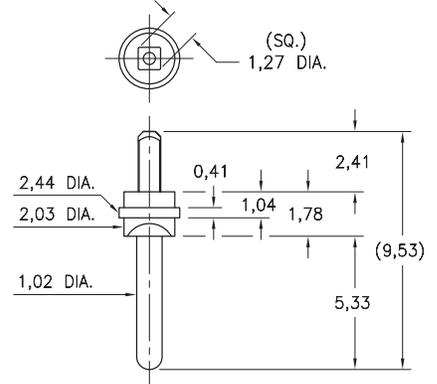
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,28mm) .0505"



### 5459

5459-0-00-XX-00-00-03-0

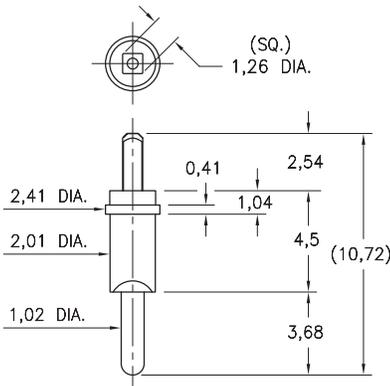
Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,3mm) .051"



### 9061

9061-0-00-XX-00-00-03-0

Solderless press-fit pin for plated through-hole  
Recommended drilled hole size: (1,28mm) .0505"



Recommended drilled hole sizes are prior to plating of the PCB and based on typical copper deposition of .5 - 1 oz. This results in a reduction of hole size by approximately 0,038 - 0,076. Depending on surface plating, typical finished hole sizes are 0,076 - 0,127 smaller than drilled hole sizes. The finished hole size tolerance for press-fit applications should be specified as +/- 0,051

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
( Except where noted ) \*

**Dimensions:** Inches

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - 0 - 0X - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27µm GOLD OVER NICKEL (RoHS)

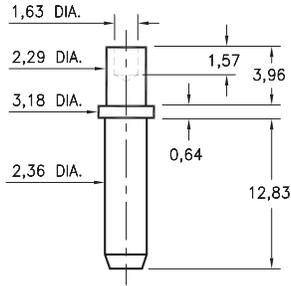
# MALE PCB PINS

## PRINTED CIRCUIT PINS

### 5231

5231-0-00-XX-00-00-38-0

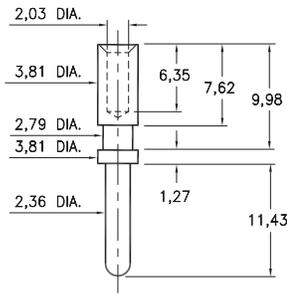
Swage mount in 2,39 hole  
For a 3,18 thick board



### 9092

9092-0-00-XX-00-00-38-0

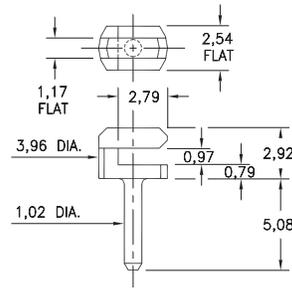
Wire crimp termination up to 14 AWG



### 7310

7310-0-01-XX-00-00-08-0

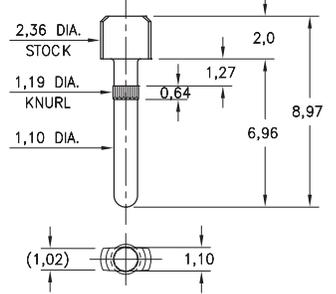
Board edge press-fit



### 5066

5066-0-00-26-00-00-03-0

Press-fit in 1,09 mounting hole

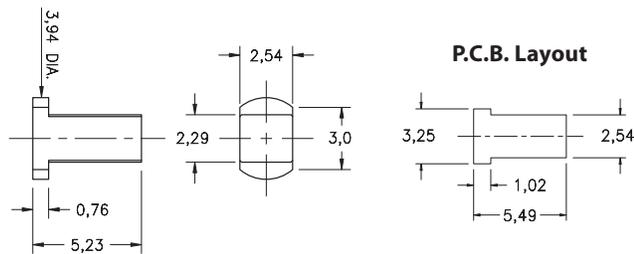


### 7937

7937-0-00-15-00-00-03-0

Target contact, horizontal surface mount  
Also available on 16mm wide carrier tape:  
2,400 parts per 330mm reel.

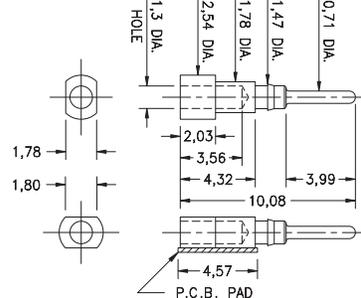
See page 224.2 for Tape & Reel details



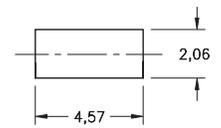
### 1502

1502-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole



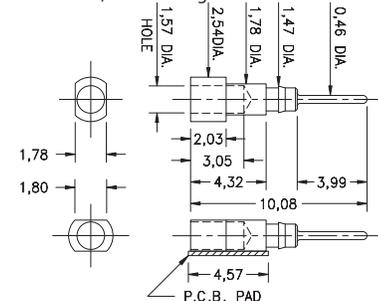
P.C.B. Layout



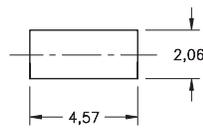
### 5102

5102-0-00-XX-00-00-33-0

Press-fit in 1,45 mounting hole



P.C.B. Layout

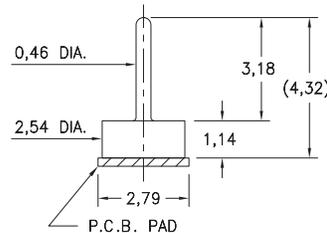


### 1508

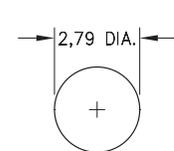
1508-0-00-15-00-00-03-0

Test point, surface mount  
Also available on 16mm wide carrier tape:  
1,600 parts per 330mm reel.

See page 224.2 for Tape & Reel details



P.C.B. Layout



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except swage pins which are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - 0X - XX - 00 - 00 - XX - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



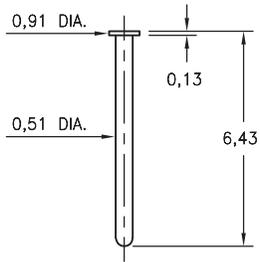
# MALE PCB PINS

## PINS ON TAPE & REEL PACKAGING

### 6547

6547-0-57-XX-00-00-33-0

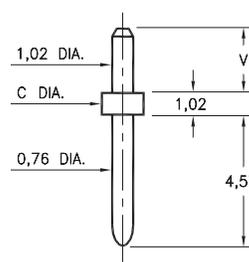
Solder mount in 0,61 mounting hole  
24mm wide X 8mm pitch carrier tape:  
1,080 parts per 330mm reel.



### 3137

3137-1-57-XX-00-00-08-0

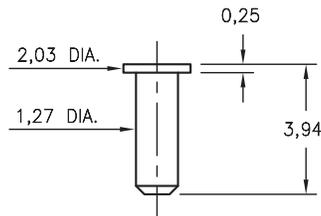
Solder mount in 1,09 mounting hole  
16mm wide X 12mm pitch carrier tape:  
580 parts per 330mm reel.



### 2381

2381-0-57-XX-00-00-33-0

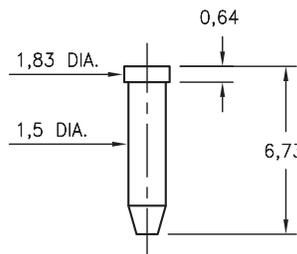
Solder mount in 1,37 mounting hole  
16mm wide X 8mm pitch carrier tape:  
1,800 parts per 330mm reel.



### 9265

9265-0-57-XX-00-00-38-0

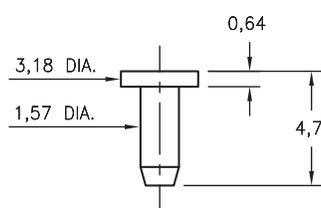
Solder mount in 1,6 mounting hole  
16mm wide X 8mm pitch carrier tape:  
1,170 parts per 330mm reel.



### 9022

9022-0-57-XX-00-00-33-0

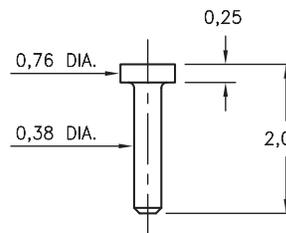
Solder mount in 1,68 mounting hole  
24mm wide X 8mm pitch carrier tape:  
1,500 parts per 330mm reel.



### 4825

4825-0-57-XX-00-00-33-0

Solder mount in 0,48 mounting hole  
16mm wide X 8mm pitch carrier tape:  
3,250 parts per 330mm reel.



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - 00 - XX - 00 - 00 - 0X - 0

**BASIC PART #** →

→ **SPECIFY PIN FINISH:**

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 1,27 $\mu$ m GOLD OVER NICKEL (RoHS)



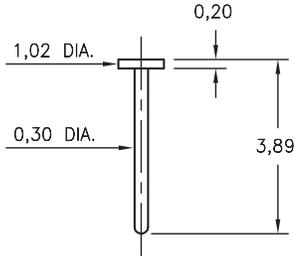
# MALE PCB PINS

## PINS ON TAPE & REEL PACKAGING

### 9083

9083-0-57-XX-00-00-38-0

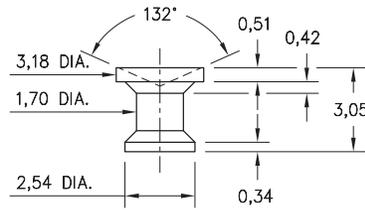
Solder mount in .016 mounting hole  
16mm wide X 8mm pitch carrier tape:  
1,950 parts per 13" reel.



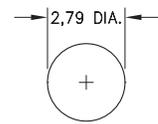
### 1943

1943-0-57-15-00-00-03-0

Concave face Target contact, surface mount  
16mm wide X 8mm pitch carrier tape:  
2,200 parts per 330mm reel.



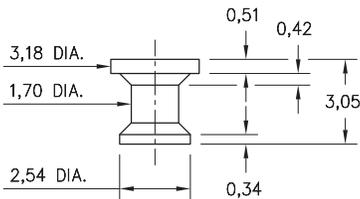
P.C.B. Layout



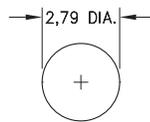
### 1944

1944-0-57-15-00-00-03-0

Flat face Target contact, surface mount  
16mm wide X 8mm pitch carrier tape:  
2,200 parts per 330mm reel.



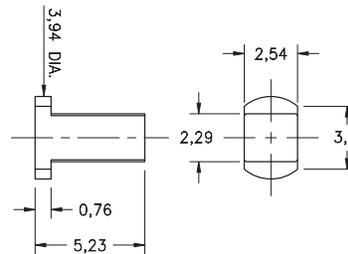
P.C.B. Layout



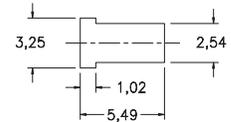
### 7937

7937-0-58-15-00-00-03-0

Target contact, horizontal surface mount  
16mm wide X 8mm pitch carrier tape:  
2,400 parts per 330mm reel.



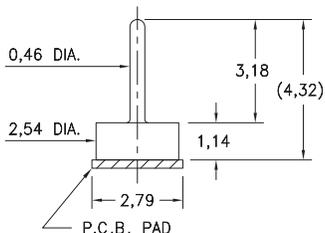
P.C.B. Layout



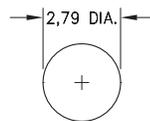
### 1508

1508-0-57-15-00-00-03-0

Test point, surface mount  
16mm wide X 8mm pitch carrier tape:  
1,600 parts per 330mm reel.



P.C.B. Layout



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

◆ 15 0,25µm GOLD OVER NICKEL (RoHS)



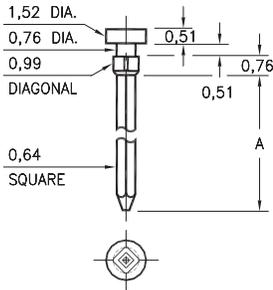
# MALE PCB PINS

## WRAPOST TERMINALS

### 5275

5275-X-05-XX-00-00-01-0

Square press-fit in 0,89 plated through-hole

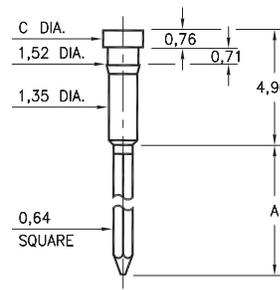


Basic Part Number	# of Wraps	Length A
5275-1	1	9,40
5275-2	2	11,94
5275-3	3	15,49

### 1010 ⇔ 1012/1020 ⇔ 1022

10XX-X-05-XX-00-00-01-0

Press-fit in 1,45 mounting hole

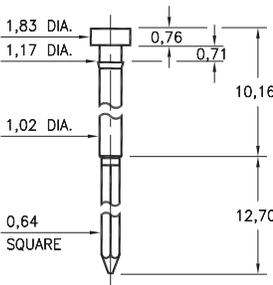


Basic Part Number	# of Wraps	Wrapost Length A	Head Dia. C
1012-1	1	6,60	1,83
1011-2	2	9,14	
1010-3	3	12,7	
1022-1	1	6,60	1,57
1021-2	2	9,14	
1020-3	3	12,7	

### 1215

1215-3-05-XX-00-00-01-0

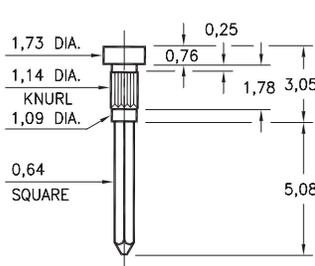
Press-fit in 1,09 mounting hole



### 1124

1124-0-05-XX-00-00-01-0

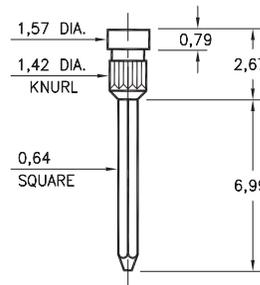
Press-fit in 1,09 mounting hole



### 1210

1210-0-05-XX-00-00-01-0

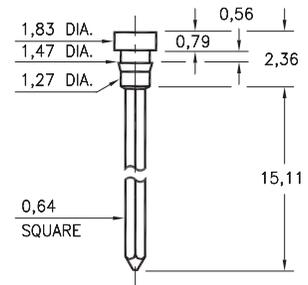
Press-fit in 1,35 mounting hole



### 1222

1222-0-05-XX-00-00-01-0

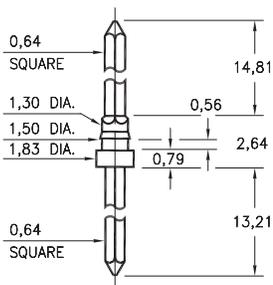
Press-fit in 1,40 mounting hole



### 1221

1221-0-05-XX-00-00-01-0

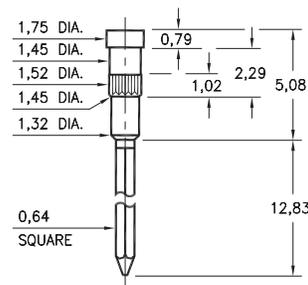
Press-fit in 1,42 mounting hole



### 1110

1110-3-05-XX-00-00-01-0

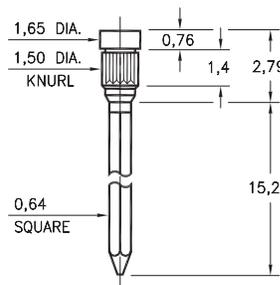
Press-fit in 1,45 mounting hole



### 1094

1094-0-05-XX-00-00-01-0

Press-fit in 1,42 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - 05 - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)



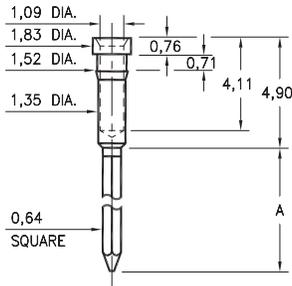
# MALE PCB PINS

## WRAPOST TERMINALS

### 1030 → 1032

103X-X-05-XX-00-00-01-0

Press-fit in 1,45 mounting hole

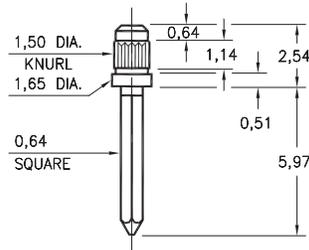


Basic Part Number	# of Wraps	Length A
1032-1	1	6,60
1031-2	2	9,14
1030-3	3	12,7

### 1216

1216-0-05-XX-00-00-01-0

Press-fit in 1,42 mounting hole

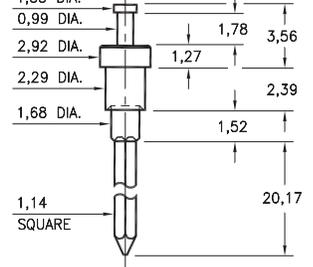


### 1095

1095-0-05-XX-00-00-01-0

Swage mount in 2,39 hole

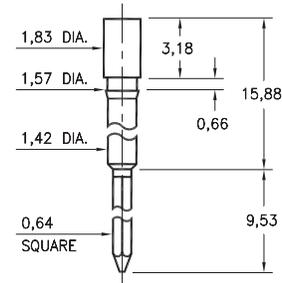
For a 1,57 thick board



### 1214

1214-0-05-XX-00-00-01-0

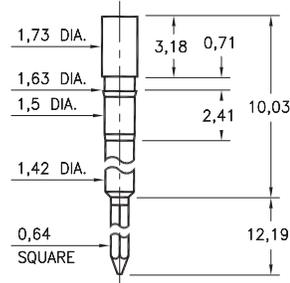
Press-fit in 1,50 mounting hole



### 1212

1212-0-05-XX-00-00-01-0

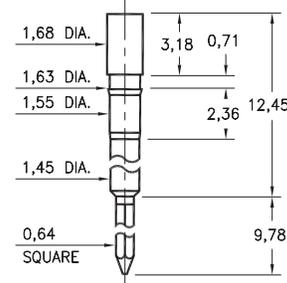
Press-fit in 1,55 mounting hole



### 1213

1213-0-05-XX-00-00-01-0

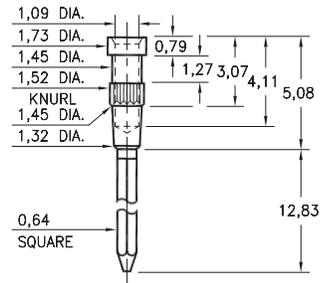
Press-fit in 1,55 mounting hole



### 0318

0318-3-05-XX-00-00-01-0

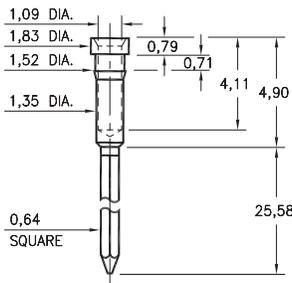
Press-fit in 1,45 mounting hole



### 1302

1302-0-05-XX-00-00-01-0

Press-fit in 1,45 mounting hole

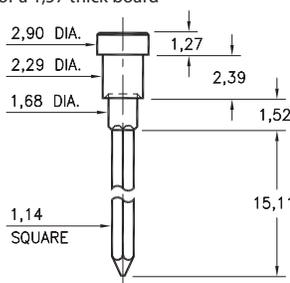


### 1097

1097-0-05-XX-00-00-01-0

Swage mount in 2,39 hole

For a 1,57 thick board



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
( Except swage pins which are annealed )

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 05 - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)



# MALE PCB PINS

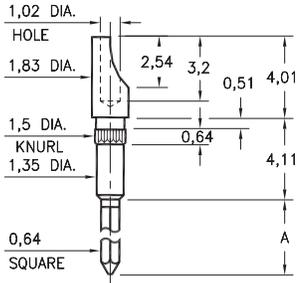
## WRAPOST TERMINALS

### 8301

**8301-X-24-XX-00-00-01-0**

Press-fit in 1,45 mounting hole

For wire sizes up to 22 AWG

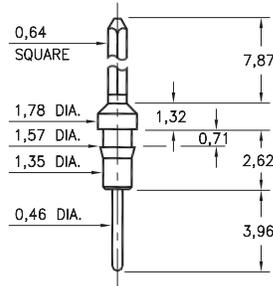


Basic Part Number	# of Wraps	Length A
<b>8301-2</b>	2	9,40
<b>8301-3</b>	3	12,95

### 1083

**1083-0-05-XX-00-00-01-0**

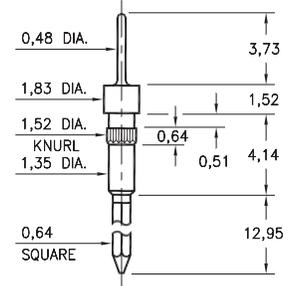
Press-fit in 1,50 mounting hole



### 5301

**5301-0-05-XX-00-00-01-0**

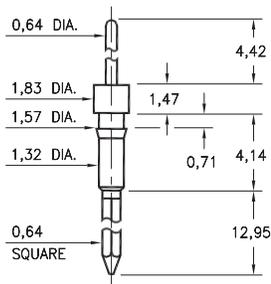
Press-fit in 1,45 mounting hole



### 1090

**1090-0-05-XX-00-00-01-0**

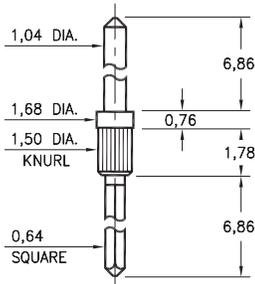
Press-fit in 1,50 mounting hole



### 8608

**8608-0-05-XX-00-00-01-0**

Press-fit in 1,42 mounting hole



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - XX - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 0,25 $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51 $\mu$ m GOLD OVER NICKEL (RoHS)



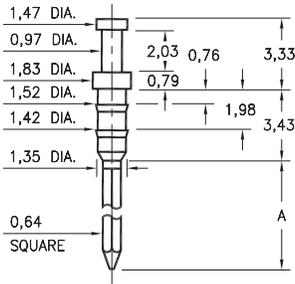
# MALE PCB PINS

## WRAPOST TERMINALS

### 1096

1096-X-05-XX-00-00-01-0

Press-fit in 1,45 mounting hole

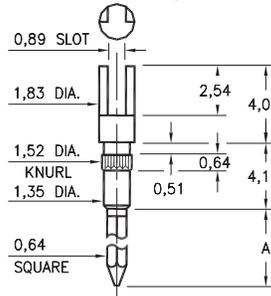


Basic Part Number	# of Wraps	Length A
1096-2	2	9,68
1096-3	3	13,39

### 1106

1106-X-23-XX-00-00-01-0

Press-fit in 1,45 mounting hole

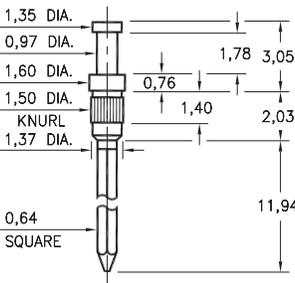


Basic Part Number	# of Wraps	Length A
1106-2	2	9,40
1106-3	3	12,95

### 1093

1093-0-05-XX-00-00-01-0

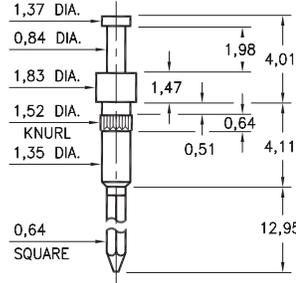
Press-fit in 1,42 mounting hole



### 0730

0730-3-05-XX-00-00-01-0

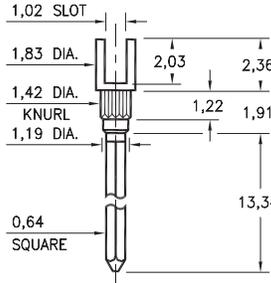
Press-fit in 1,45 mounting hole



### 1122

1122-0-22-XX-00-00-01-0

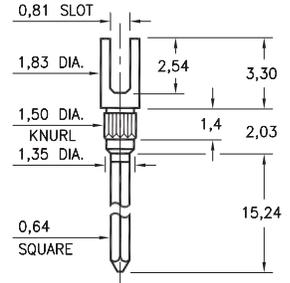
Press-fit in 1,35 mounting hole



### 1064

1064-0-23-XX-00-00-01-0

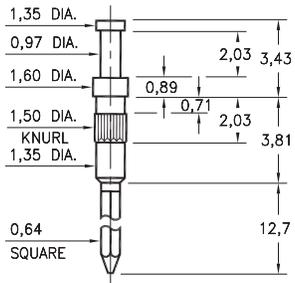
Press-fit in 1,42 mounting hole



### 1092

1092-0-05-XX-00-00-01-0

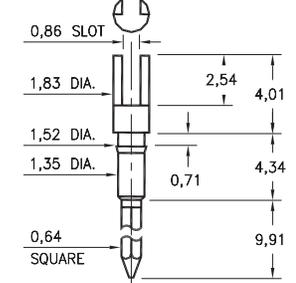
Press-fit in 1,42 mounting hole



### 1068

1068-0-23-XX-00-00-01-0

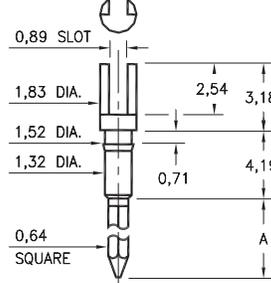
Press-fit in 1,45 mounting hole



### 1070 → 1072

107X-X-23-XX-00-00-01-0

Press-fit in 1,45 mounting hole



Basic Part Number	# of Wraps	Length A
1072-1	1	6,60
1071-2	2	9,40
1070-3	3	12,95

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ±0,13  
Diameters: ±0,051  
Angles: ±2°



ORDER CODE: XXXX - X - XX - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 21 0,51µm GOLD OVER NICKEL (RoHS)



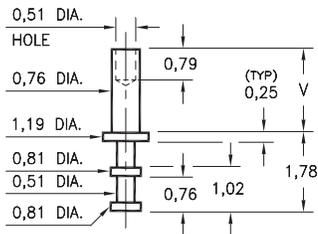
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2111

2111-X-00-XX-00-00-07-0

Swage mount in 0,84 hole

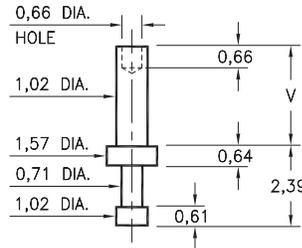


Basic Part Number	Board Thickness	Length V
2111-1	0,79	1,35
2111-2	1,57	2,13
2111-3	2,39	2,92

### 2113

2113-X-00-XX-00-00-07-0

Swage mount in 1,09 hole

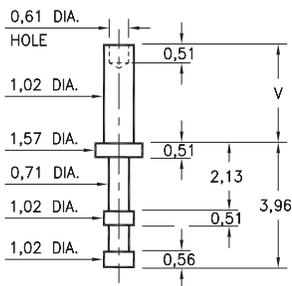


Basic Part Number	Board Thickness	Length V
2113-1	0,79	1,35
2113-2	1,57	2,13
2113-3	2,39	2,92
2113-4	3,18	3,73

### 2108

2108-X-00-XX-00-00-07-0

Swage mount in 1,09 hole

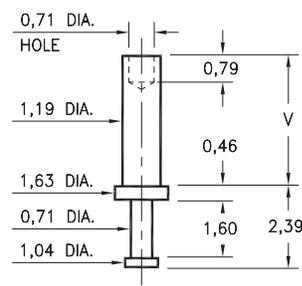


Basic Part Number	Board Thickness	Length V
2108-1	0,79	1,35
2108-2	1,57	2,13
2108-3	2,39	2,92
2108-4	3,18	3,73

### 2102

2102-X-00-XX-00-00-07-0

Swage mount in 1,32 hole

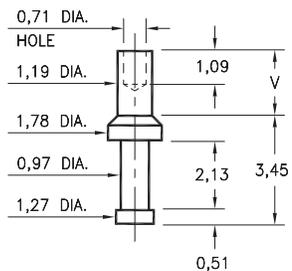


Basic Part Number	Board Thickness	Length V
2102-5	0,41	0,89
2102-1	0,79	1,37
2102-2	1,57	2,13
2102-3	2,39	2,92
2102-4	3,18	3,73

### 2109

2109-X-00-XX-00-00-07-0

Swage mount in 1,32 hole



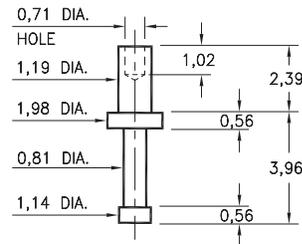
Basic Part Number	Board Thickness	Length V
2109-1	0,79	1,32
2109-2	1,57	2,16

### 2324

2324-2-00-XX-00-00-07-0

Swage mount in 1,32 hole

For a 1,57 thick board



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



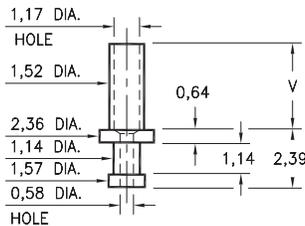
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2312

2312-X-00-XX-00-00-07-0

Swage mount in 1,63 hole

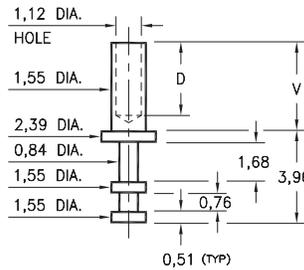


Basic Part Number	Board Thickness	Length V
2312-1	0,79	1,35
2312-2	1,57	2,39
2312-3	2,39	2,92
2312-4	3,18	3,73

### 2308

2308-X-00-XX-00-00-07-0

Swage mount in 1,63 hole

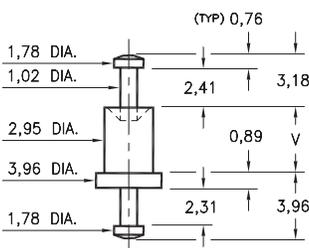


Basic Part Number	Board Thickness	Length V	Depth D
2308-1	0,79	1,37	0,91
2308-2	1,57	2,13	1,68
2308-3	2,39	2,92	2,44
2308-4	3,18	3,73	3,20

### 2707

2707-X-00-XX-00-00-07-0

Swage mount in 3,05 hole

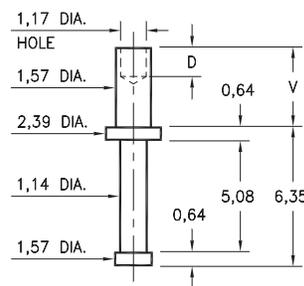


Basic Part Number	Board Thickness	Length V
2707-1	0,79	1,57
2707-2	1,57	2,39
2707-3	2,39	3,18
2707-4	3,18	3,96

### 2329

2329-X-00-XX-00-00-07-0

Swage mount in 1,70 hole

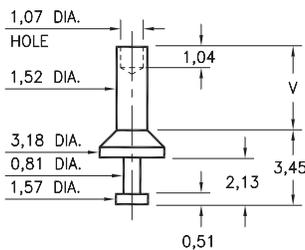


Basic Part Number	Board Thickness	Length V	Depth D
2329-1	0,79	1,14	1,14
2329-2	1,57	2,39	1,57
2329-3	2,39	3,18	1,57
2329-4	3,18	3,96	1,57

### 2510

2510-X-00-XX-00-00-07-0

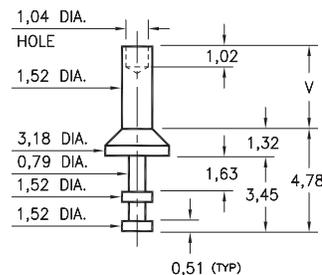
Swage mount in 1,63 hole



### 2513

2513-X-00-XX-00-00-07-0

Swage mount in 1,63 hole



Basic Part Number	Board Thickness	Length V
251X-1	0,79	1,57
251X-2	1,57	2,39
251X-3	2,39	3,18
251X-4	3,18	3,96

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



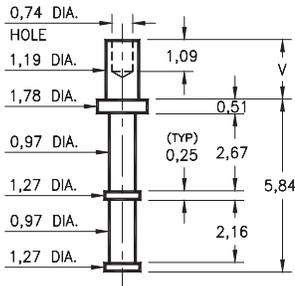
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2110

2110-X-00-XX-00-00-07-0

Swage mount in 1,32 hole

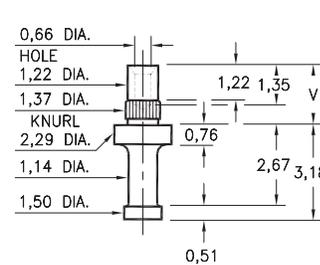


Basic Part Number	Board Thickness	Length V
2110-1	0,79	1,24
2110-2	1,57	2,08

### 2333

2333-X-00-XX-00-00-07-0

Press-fit & swage in 1,32 mounting hole

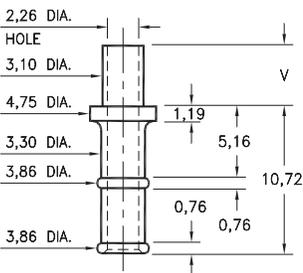


Basic Part Number	Board Thickness	Length V
2333-1	1,98	2,62
2333-2	1,57	2,21
2333-3	1,19	1,83

### 2821

2821-X-00-XX-00-00-07-0

Swage mount in 3,18 hole

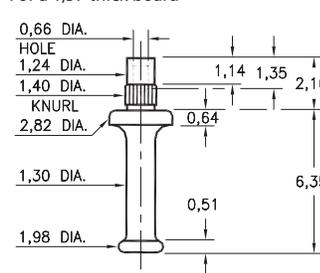


Basic Part Number	Board Thickness	Length V
2821-2	1,57	2,77
2821-3	2,39	3,58
2821-4	3,18	4,37

### 2533

2533-0-00-XX-00-00-07-0

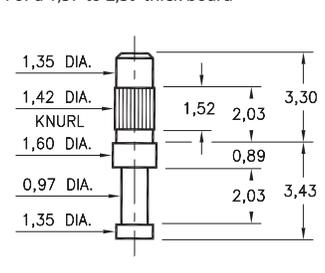
Press-fit & swage in 1,32 mounting hole  
For a 1,57 to 2,39 thick board



### 2101

2101-3-00-XX-00-00-07-0

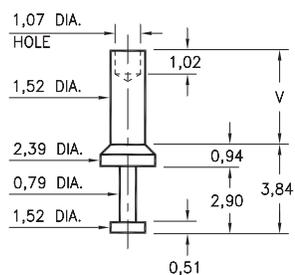
Press-fit in 1,35 mounting hole  
For a 1,57 to 2,39 thick board



### 2316

2316-X-00-XX-00-00-07-0

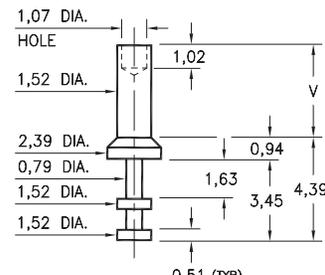
Swage mount in 1,63 hole



### 2317

2317-X-00-XX-00-00-07-0

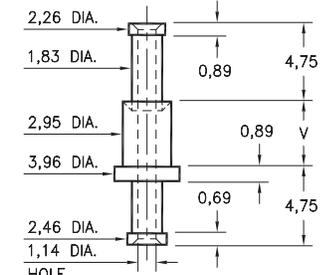
Swage mount in 1,63 hole



### 2708

2708-X-00-XX-00-00-07-0

Swage mount in 3,05 hole



Basic Part Number	Board Thickness	Length V
2XXX-1	0,79	1,57
2XXX-2	1,57	2,39
2XXX-3	2,39	3,18
2XXX-4	3,18	3,96

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 44 7,62µm SILVER OVER COPPER (RoHS)
- 50 7,62µm ELECTRO-SOLDER (60/40 SnPb)



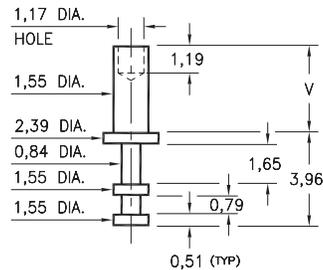
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2348

2348-X-00-XX-00-00-07-0

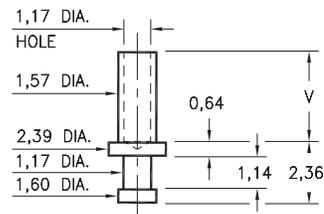
Swage mount in 1,63 hole



### 2301

2301-X-00-XX-00-00-07-0

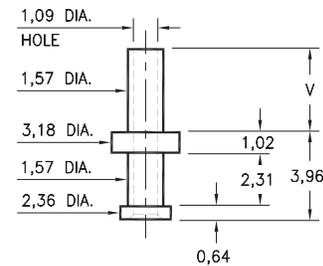
Swage mount in 1,70 hole



### 2506

2506-X-00-XX-00-00-07-0

Swage mount in 1,70 hole

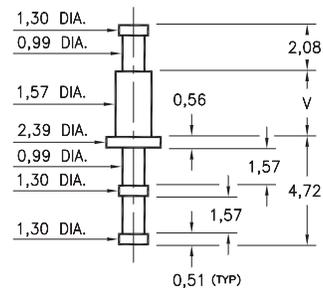


Basic Part Number	Board Thickness	Length V
2XXX-1	0,79	1,35
2XXX-2	1,57	2,13
2XXX-3	2,39	2,92
2XXX-4	3,18	3,73

### 2310

2310-X-00-XX-00-00-07-0

Swage mount in 1,70 hole

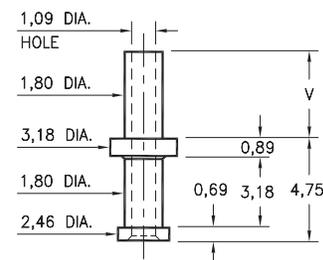


Basic Part Number	Board Thickness	Length V
2310-1	0,79	1,35
2310-2	1,57	2,08
2310-3	2,39	2,87
2310-4	3,18	3,68

### 2505

2505-X-00-XX-00-00-07-0

Swage mount in 1,93 hole

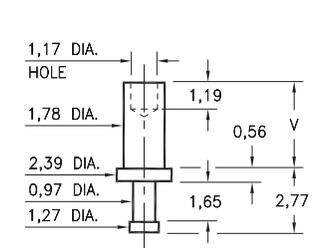


Basic Part Number	Board Thickness	Length V
2505-1	0,79	1,57
2505-2	1,57	2,36
2505-3	2,39	3,18
2505-4	3,18	3,96

### 2325

2325-X-00-XX-00-00-07-0

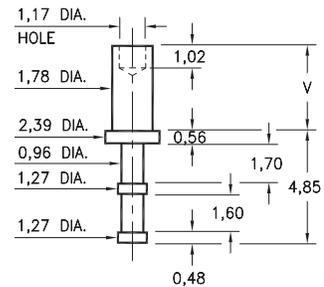
Swage mount in 1,85 hole



### 2355

2355-X-00-XX-00-00-07-0

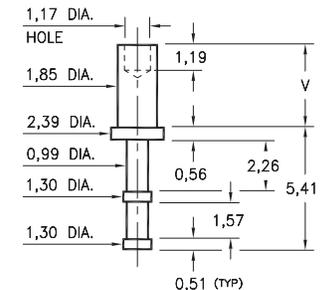
Swage mount in 1,85 hole



### 2365

2365-X-00-XX-00-00-07-0

Swage mount in 1,93 hole



Basic Part Number	Board Thickness	Length V
23X5-1	0,79	1,35
23X5-2	1,57	2,13
23X5-3	2,39	2,92
23X5-4	3,18	3,73

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 44 7,62µm SILVER OVER COPPER (RoHS)
- 50 7,62µm ELECTRO-SOLDER  
(60/40 SnPb)



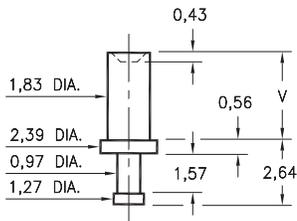
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2304

2304-X-00-XX-00-00-07-0

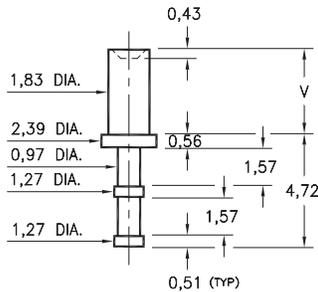
Swage mount in 1,93 hole



### 2305

2305-X-00-XX-00-00-07-0

Swage mount in 1,93 hole

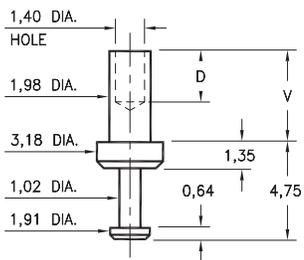


Basic Part Number	Board Thickness	Length V
230X-1	0,79	1,30
230X-2	1,57	2,08
230X-3	2,39	2,87
230X-4	3,18	3,68

### 2503

2503-X-00-XX-00-00-07-0

Swage mount in 2,08 hole

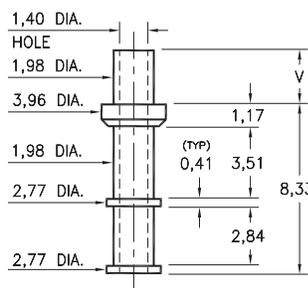


Basic Part Number	Board Thickness	Length V	Depth D
2503-1	0,79	1,98	1,72
2503-2	1,57	2,77	2,49
2503-3	2,39	3,58	2,49
2503-4	3,18	4,39	2,49

### 2704

2704-X-00-XX-00-00-07-0

Swage mount in 2,08 hole

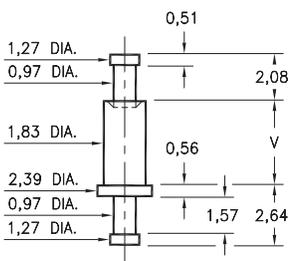


Basic Part Number	Board Thickness	Length V
2704-1	0,79	1,91
2704-2	1,57	2,67
2704-3	2,39	3,43
2704-4	3,18	4,19

### 2306

2306-X-00-XX-00-00-07-0

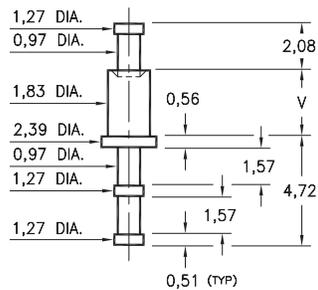
Swage mount in 1,93 hole



### 2307

2307-X-00-XX-00-00-07-0

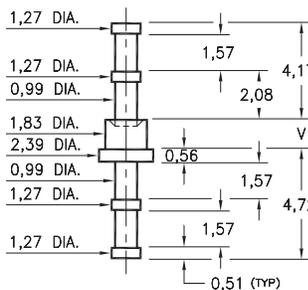
Swage mount in 1,93 hole



### 2311

2311-X-00-XX-00-00-07-0

Swage mount in 1,93 hole



Basic Part Number	Board Thickness	Length V
23XX-1	0,79	1,30
23XX-2	1,57	2,08
23XX-3	2,39	2,87
23XX-4	3,18	3,68

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



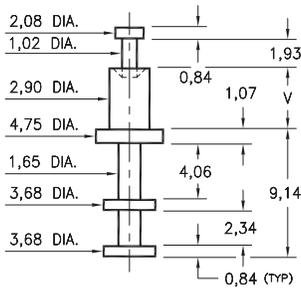
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2810

2810-X-00-XX-00-00-07-0

Swage mount in 3,0 hole

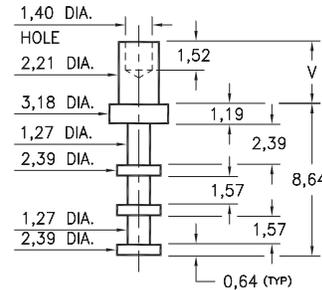


Basic Part Number	Board Thickness	Length V
2810-2	1,57	2,67
2810-3	2,39	3,43
2810-4	3,18	4,19

### 2524

2524-X-00-XX-00-00-07-0

Swage mount in 2,34 hole

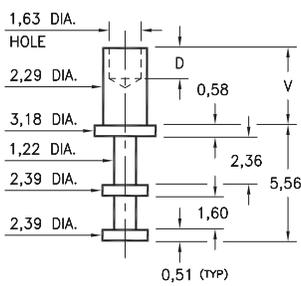


Basic Part Number	Board Thickness	Length V
2524-1	0,79	1,91
2524-2	1,57	2,67
2524-3	2,39	3,43
2524-4	3,18	4,19

### 2561

2561-X-00-XX-00-00-07-0

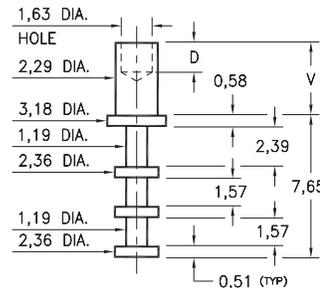
Swage mount in 2,39 hole



### 2508

2508-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

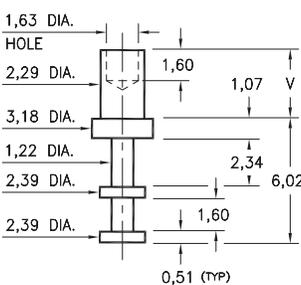


Basic Part Number	Board Thickness	Length V	Depth D
25XX-1	0,79	1,60	1,19
25XX-2	1,57	2,39	1,57
25XX-3	2,39	3,18	1,57
25XX-4	3,18	3,96	1,57

### 2551

2551-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

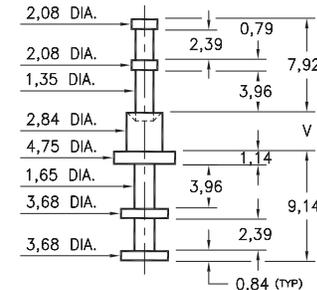


Basic Part Number	Board Thickness	Length V
2551-1	0,79	1,91
2551-2	1,57	2,67
2551-3	2,39	3,43
2551-4	3,18	4,19

### 2812

2812-X-00-XX-00-00-07-0

Swage mount in 2,95 hole



Basic Part Number	Board Thickness	Length V
2812-1	1,57	2,67
2812-2	2,39	3,43
2812-3	3,18	4,19
2812-4	4,78	5,84

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



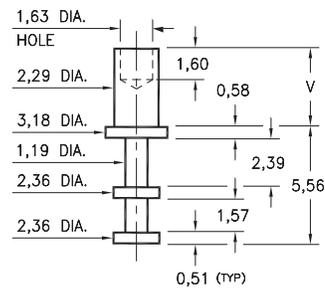
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2501

2501-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

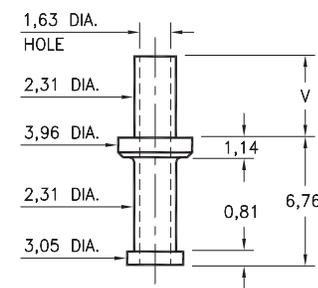


Basic Part Number	Board Thickness	Length V
2501-1	0,79	1,98
2501-2	1,57	2,77
2501-3	2,39	3,56
2501-4	3,18	4,34

### 2703

2703-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

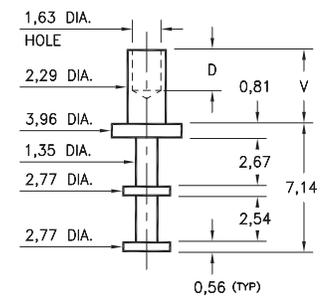


Basic Part Number	Board Thickness	Length V
2703-1	0,79	1,96
2703-2	1,57	2,72
2703-3	2,39	3,48
2703-4	3,18	4,24

### 2702

2702-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

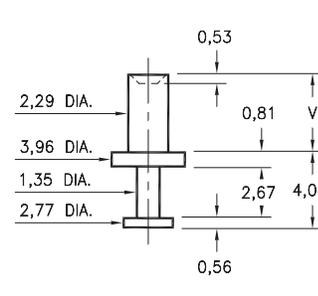


Basic Part Number	Board Thickness	Length V	Depth D
2702-1	0,79	1,91	1,60
2702-2	1,57	2,67	2,36
2702-3	2,39	3,43	2,36
2702-4	3,18	4,19	2,36

### 2710

2710-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

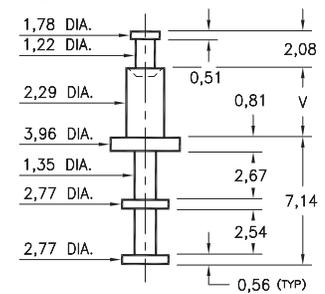


Basic Part Number	Board Thickness	Length V
2710-1	0,79	1,57
2710-2	1,57	2,39
2710-3	2,39	3,18
2710-4	3,18	3,96

### 2717

2717-X-00-XX-00-00-07-0

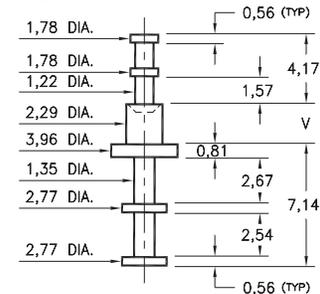
Swage mount in 2,39 hole



### 2713

2713-X-00-XX-00-00-07-0

Swage mount in 2,39 hole



Basic Part Number	Board Thickness	Length V
271X-1	0,79	1,57
271X-2	1,57	2,39
271X-3	2,39	3,18
271X-4	3,18	3,96

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08μm TIN/LEAD OVER NICKEL
- ◆ 80 5,08μm TIN OVER NICKEL (RoHS)
- ◆ 44 7,62μm SILVER OVER COPPER (RoHS)
- 50 7,62μm ELECTRO-SOLDER (60/40 SnPb)



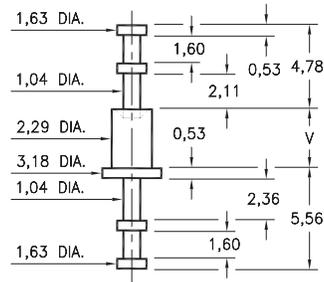
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2512

2512-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

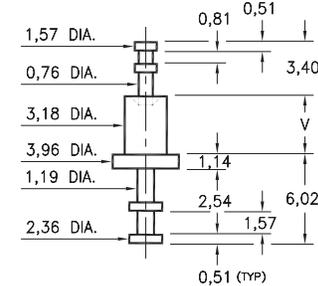


Basic Part Number	Board Thickness	Length V
<b>2512-1</b>	0,79	1,57
<b>2512-2</b>	1,57	2,39
<b>2512-3</b>	2,39	3,18
<b>2512-4</b>	3,18	3,96

### 2705

2705-X-00-XX-00-00-07-0

Swage mount in 3,28 hole

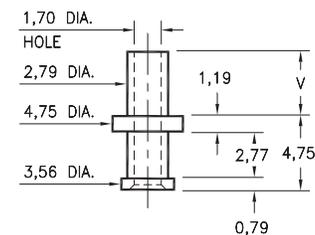


Basic Part Number	Board Thickness	Length V
<b>2705-1</b>	0,79	1,91
<b>2705-2</b>	1,57	2,67
<b>2705-3</b>	2,39	3,43
<b>2705-4</b>	3,18	4,19

### 2803

2803-X-00-XX-00-00-07-0

Swage mount in 2,87 hole

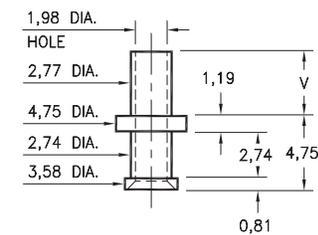


Basic Part Number	Board Thickness	Length V
<b>2803-1</b>	0,79	1,98
<b>2803-2</b>	1,57	2,77
<b>2803-3</b>	2,39	3,56
<b>2803-4</b>	3,18	4,34

### 2815

2815-X-00-XX-00-00-07-0

Swage mount in 2,87 hole

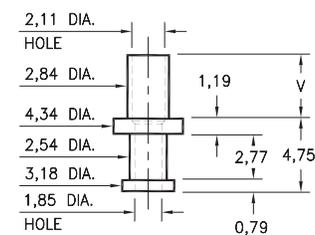


Basic Part Number	Board Thickness	Length V
<b>2815-1</b>	0,79	1,91
<b>2815-2</b>	1,57	2,67
<b>2815-3</b>	2,39	3,43
<b>2815-4</b>	3,18	4,19

### 2816

2816-X-00-XX-00-00-07-0

Swage mount in 2,95 hole

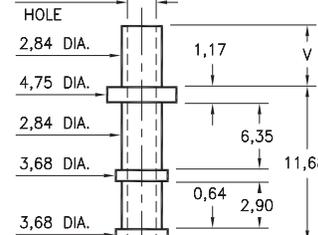


Basic Part Number	Board Thickness	Length V
<b>2816-1</b>	0,79	1,98
<b>2816-2</b>	1,57	2,77
<b>2816-3</b>	2,39	3,58
<b>2816-4</b>	3,18	4,37

### 2817

2817-X-00-XX-00-00-07-0

Swage mount in 2,95 hole



Basic Part Number	Board Thickness	Length V
<b>2817-1</b>	0,79	1,91
<b>2817-2</b>	1,57	2,67
<b>2817-3</b>	2,39	3,43
<b>2817-4</b>	3,18	4,19

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01** 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- 80** 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- 44** 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50** 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



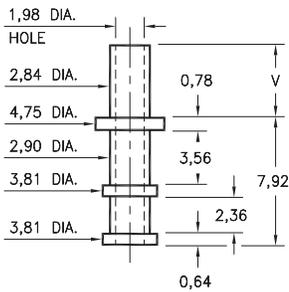
# MALE PCB PINS

## SOLDER TERMINAL TURRETS

### 2802

2802-X-00-XX-00-00-07-0

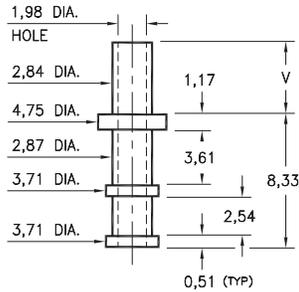
Swage mount in 3,0 hole



### 2804

2804-X-00-XX-00-00-07-0

Swage mount in 3,0 hole

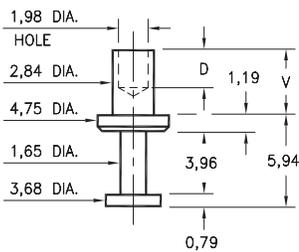


Basic Part Number	Board Thickness	Length V
280X-1	0,79	1,98
280X-2	1,57	2,77
280X-3	2,39	3,56
280X-4	3,18	4,34

### 2805

2805-X-00-XX-00-00-07-0

Swage mount in 2,95 hole

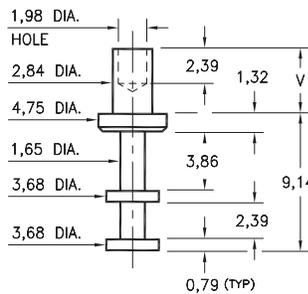


Basic Part Number	Board Thickness	Length V	Depth D
2805-1	0,79	1,88	1,73
2805-2	1,57	2,67	2,49
2805-3	2,39	3,43	2,49
2805-4	3,18	4,19	2,49

### 2801

2801-X-00-XX-00-00-07-0

Swage mount in 2,95 hole

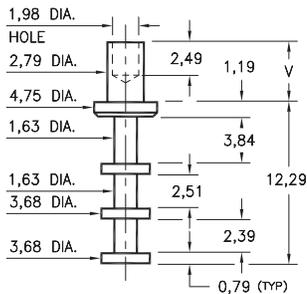


Basic Part Number	Board Thickness	Length V
2801-1	0,79	1,98
2801-2	1,57	2,77
2801-3	2,39	3,58
2801-4	3,18	4,37
2801-5	4,76	5,94

### 2806

2806-X-00-XX-00-00-07-0

Swage mount in 2,95 hole

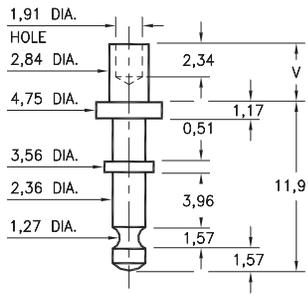


Basic Part Number	Board Thickness	Length V
2806-1	0,79	1,98
2806-2	1,57	2,77
2806-3	2,39	3,58
2806-4	3,18	4,37

### 2811

2811-X-00-XX-00-00-07-0

Swage mount in 2,95 hole



Basic Part Number	Board Thickness	Length V
2811-1	0,79	1,91
2811-2	1,57	2,67
2811-3	2,39	3,43
2811-4	3,18	4,19

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER (60/40 SnPb)



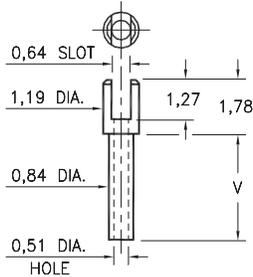
# MALE PCB PINS

## SOLDER TERMINALS SLOTTED

### 2104

2104-X-01-XX-00-00-07-0

Swage mount in 0,91 hole

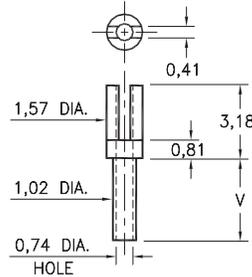


Basic Part Number	Board Thickness	Length V
2104-1	0,79	1,40
2104-2	1,57	2,18
2104-3	2,39	2,97
2104-4	3,18	3,76

### 2112

2112-X-01-XX-00-00-07-0

Swage mount in 1,09 hole

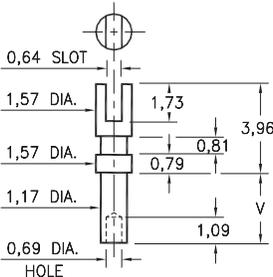


Basic Part Number	Board Thickness	Length V
2112-5	0,41	0,94
2112-1	0,79	1,35
2112-2	1,57	2,13
2112-3	2,39	2,92
2112-4	3,18	3,73

### 2105

2105-X-01-XX-00-00-07-0

Swage mount in 1,32 hole

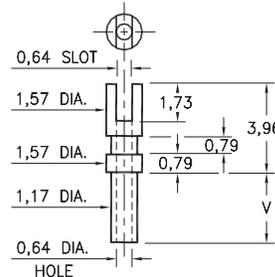


Basic Part Number	Board Thickness	Length V
2105-1	0,79	1,40
2105-2	1,57	2,18
2105-3	2,39	2,97
2105-4	3,18	3,78

### 2103

2103-X-01-XX-00-00-07-0

Swage mount in 1,32 hole

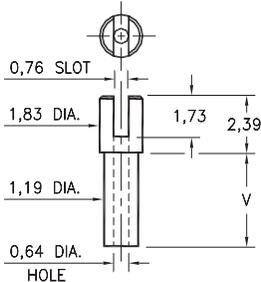


Basic Part Number	Board Thickness	Length V
2103-1	0,79	1,4
2103-2	1,57	2,18
2103-3	2,39	2,97
2103-4	3,18	3,78

### 2106

2106-X-01-XX-00-00-07-0

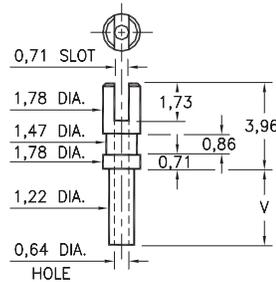
Swage mount in 1,32 hole



### 2107

2107-X-01-XX-00-00-07-0

Swage mount in 1,32 hole



Basic Part Number	Board Thickness	Length V
210X-1	0,79	1,30
210X-2	1,57	2,08
210X-3	2,39	2,87
210X-4	3,18	3,68

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



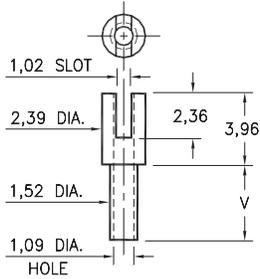
# MALE PCB PINS

## SOLDER TERMINALS SLOTTED

### 2303

2303-X-01-XX-00-00-07-0

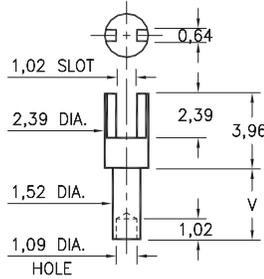
Swage mount in 1,63 hole



### 2323

2323-X-01-XX-00-00-07-0

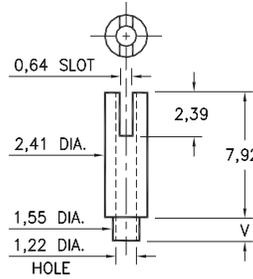
Swage mount in 1,63 hole



### 2322

2322-X-01-XX-00-00-07-0

Swage mount in 1,63 hole

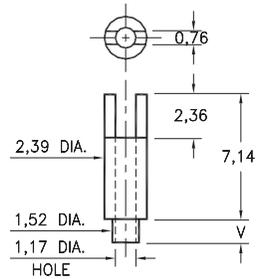


Basic Part Number	Board Thickness	Length V
23XX-1	0,79	1,35
23XX-2	1,57	2,13
23XX-3	2,39	2,92
23XX-4	3,18	3,73

### 2320

2320-X-01-XX-00-00-07-0

Swage mount in 1,63 hole

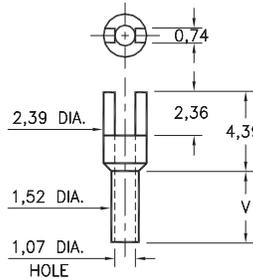


Basic Part Number	Board Thickness	Length V
2320-1	0,79	1,35
2320-2	1,57	2,13
2320-3	2,39	2,92

### 2328

2328-X-01-XX-00-00-07-0

Swage mount in 1,63 hole

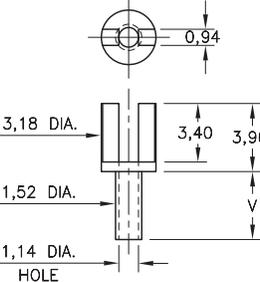


Basic Part Number	Board Thickness	Length V
2328-1	0,79	1,57
2328-2	1,57	2,39
2328-3	2,39	3,18
2328-4	3,18	3,96

### 2520

2520-X-01-XX-00-00-07-0

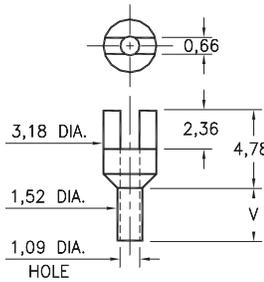
Swage mount in 1,63 hole



### 2517

2517-X-01-XX-00-00-07-0

Swage mount in 1,63 hole



Basic Part Number	Board Thickness	Length V
25XX-1	0,79	1,57
25XX-2	1,57	2,39
25XX-3	2,39	3,18
25XX-4	3,18	3,96

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

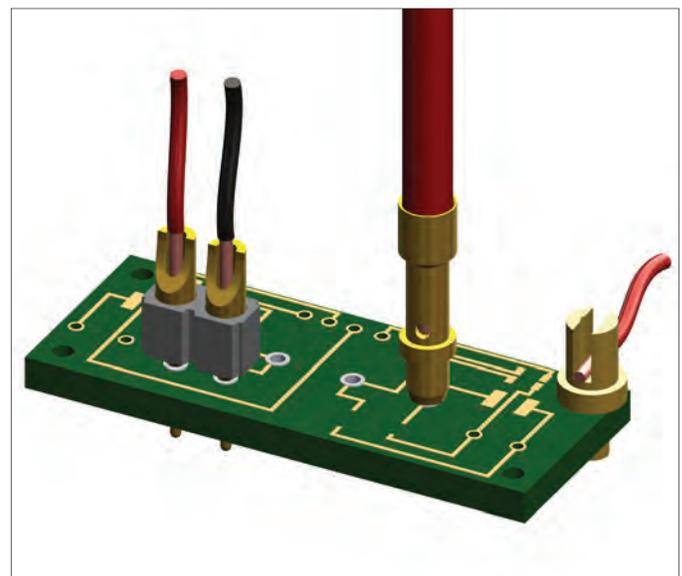
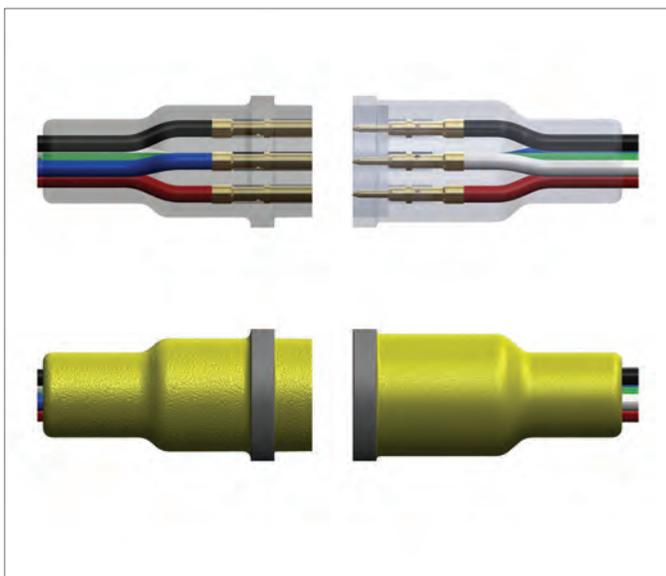
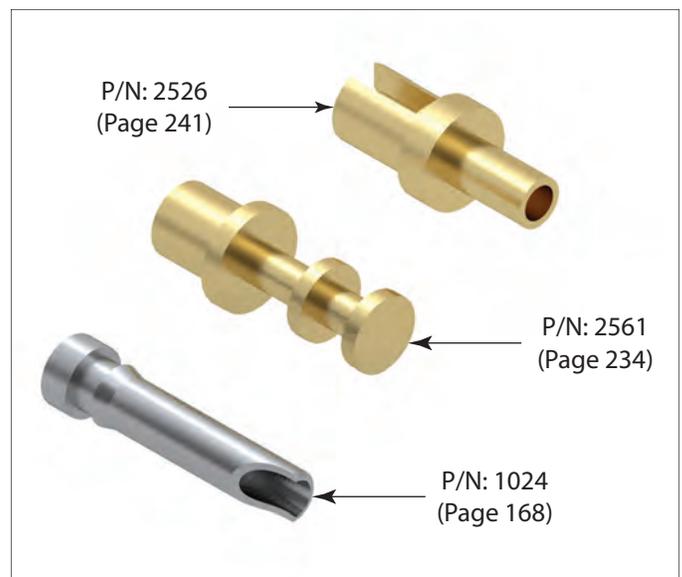
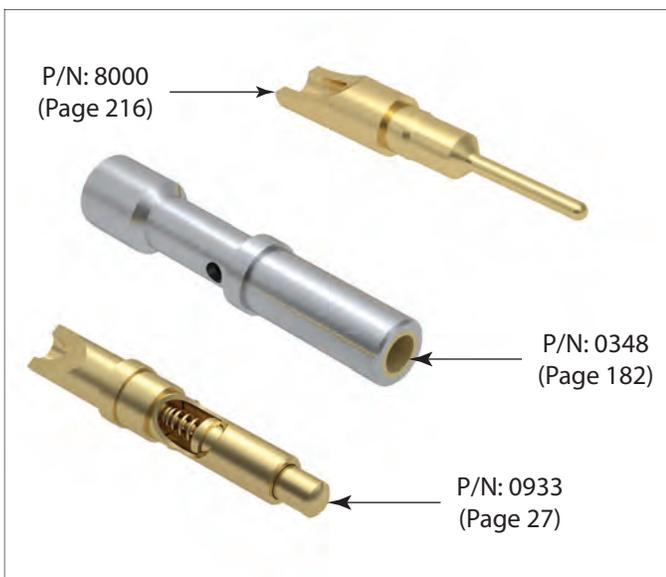
- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



# WIRE TERMINATION

## LOOSE PINS, RECEPTACLES AND SPRING PINS

Mill-Max manufactures many different types of pins and receptacles for terminating wires. There are solder cup and crimp barrel styles for terminating discrete wires to boards, making up cable assemblies or converting device wires to pluggable pins. We have slotted and turret styles for connecting power and ground wires or for test and jumper applications. Wrapost termination styles are also available for prototyping and test. Along with our wide selection of standard products, custom designs are available by contacting Mill-Max Technical Services.



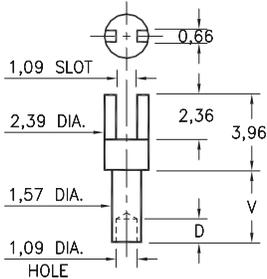
# MALE PCB PINS

## SOLDER TERMINALS SLOTTED

### 2315

2315-X-01-XX-00-00-07-0

Swage mount in 1,70 hole

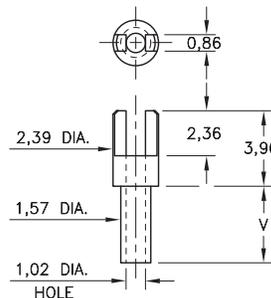


Basic Part Number	Board Thickness	Length V	Depth D
2315-1	0,79	1,14	1,02
2315-2	1,57	2,39	1,57
2315-3	2,39	3,18	1,57
2315-4	3,18	3,96	1,57

### 2302

2302-X-01-XX-00-00-07-0

Swage mount in 1,70 hole

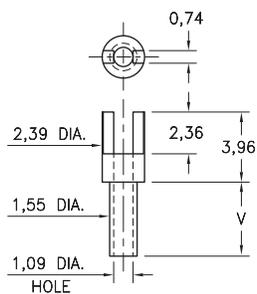


Basic Part Number	Board Thickness	Length V
2302-1	0,79	1,35
2302-2	1,57	2,13
2302-3	2,39	2,92
2302-4	3,18	3,73

### 2352

2352-X-01-XX-00-00-07-0

Swage mount in 1,70 hole

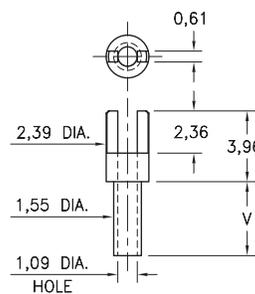


Basic Part Number	Board Thickness	Length V
2352-1	0,79	1,14
2352-2	1,57	2,39
2352-3	2,39	3,18
2352-4	3,18	3,96

### 2362

2362-X-01-XX-00-00-07-0

Swage mount in 1,70 hole

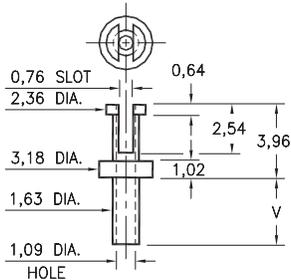


Basic Part Number	Board Thickness	Length V
2362-5	0,41	0,94
2362-1	0,79	1,35
2362-2	1,57	2,13
2362-3	2,39	2,92
2362-4	3,18	3,73

### 2507

2507-X-01-XX-00-00-07-0

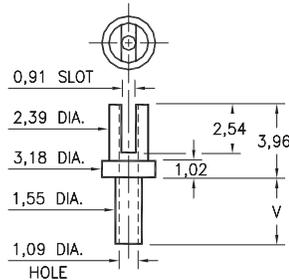
Swage mount in 1,70 hole



### 2526

2526-X-01-XX-00-00-07-0

Swage mount in 1,63 hole



Basic Part Number	Board Thickness	Length V
25XX-1	0,79	1,35
25XX-2	1,57	2,13
25XX-3	2,39	2,92
25XX-4	3,18	3,73

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



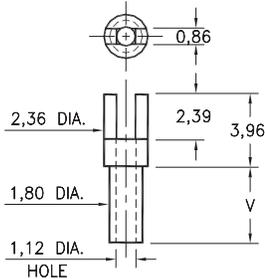
# MALE PCB PINS

## SOLDER TERMINALS SLOTTED

### 2314

2314-X-01-XX-00-00-07-0

Swage mount in 1,93 hole

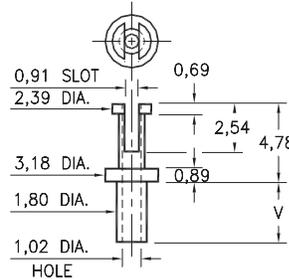


Basic Part Number	Board Thickness	Length V
2314-1	0,79	1,14
2314-2	1,57	2,39
2314-3	2,39	3,18
2314-4	3,18	3,96

### 2511

2511-X-01-XX-00-00-07-0

Swage mount in 1,93 hole

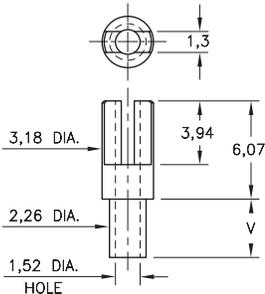


Basic Part Number	Board Thickness	Length V
2511-1	0,79	1,60
2511-2	1,57	2,39
2511-3	2,39	3,18
2511-4	3,18	3,96

### 2515

2515-X-01-XX-00-00-07-0

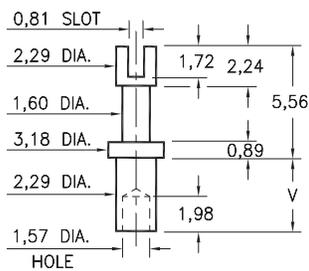
Swage mount in 2,39 hole



### 2516

2516-X-01-XX-00-00-07-0

Swage mount in 2,39 hole

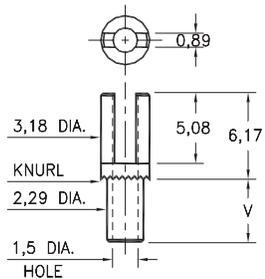


Basic Part Number	Board Thickness	Length V
251X-1	0,79	1,91
251X-2	1,57	2,67
251X-3	2,39	3,43
251X-4	3,18	3,73

### 2502

2502-X-01-XX-00-00-07-0

Swage mount in 2,39 hole



Basic Part Number	Board Thickness	Length V
2502-1	0,79	2,03
2502-2	1,57	2,82
2502-3	2,39	3,63
2502-4	3,18	4,42

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER (60/40 SnPb)



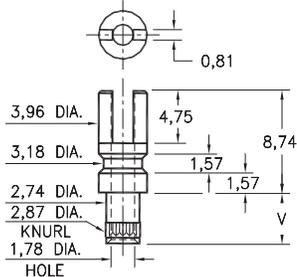
# MALE PCB PINS

## SOLDER TERMINALS SLOTTED

### 2715

2715-X-01-XX-00-00-07-0

Swage mount in 2,95 hole

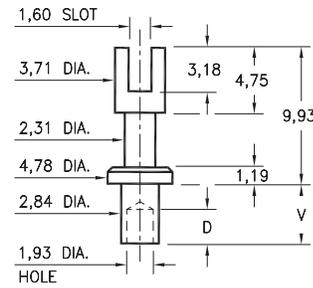


Basic Part Number	Board Thickness	Length V
2715-2	1,57	2,77
2715-3	2,39	3,58
2715-4	3,18	4,37

### 2809

2809-X-01-XX-00-00-07-0

Swage mount in 2,95 hole

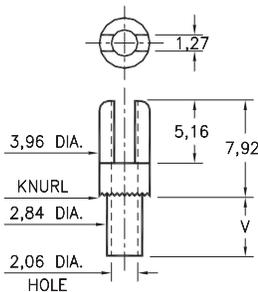


Basic Part Number	Board Thickness	Length V	Depth D
2809-1	0,79	1,98	1,73
2809-2	1,57	2,76	2,49
2809-3	2,39	3,58	2,49
2809-4	3,18	4,36	2,49

### 2701

2701-X-01-XX-00-00-07-0

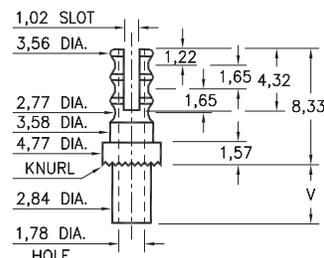
Swage mount in 2,95 hole



### 2808

2808-X-01-XX-00-00-07-0

Swage mount in 2,95 hole

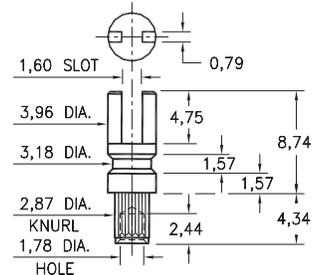


Basic Part Number	Board Thickness	Length V
2XXX-1	0,79	1,91
2XXX-2	1,57	2,67
2XXX-3	2,39	3,43
2XXX-4	3,18	4,19

### 2762

2762-4-01-XX-00-00-07-0

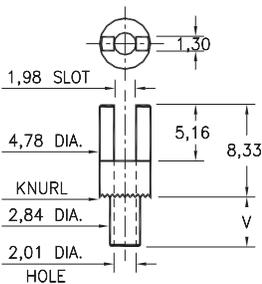
Swage mount in 2,95 hole  
For a 3,18 thick board



### 2807

2807-X-01-XX-00-00-07-0

Swage mount in 2,95 hole

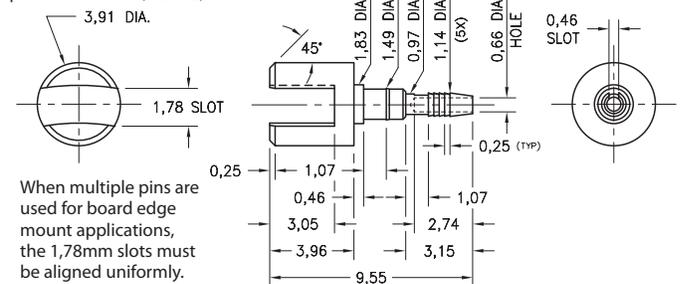


Basic Part Number	Board Thickness	Length V
2807-1	0,79	1,98
2807-2	1,57	2,77
2807-3	2,39	3,56
2807-4	3,18	4,34

### 3622

3622-0-32-15-00-00-03-0

Slotted compliant tail press-fit in 1,02 ± 0,08 plated hole. For 1,52 → 2,54 thick board



When multiple pins are used for board edge mount applications, the 1,78mm slots must be aligned uniformly.

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths: ± 0,13  
Diameters: ± 0,051  
Angles: ± 2°



ORDER CODE: XXXX - X - XX - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

Part #3622 plating ONLY

- 01 5,08µm TIN/LEAD OVER NICKEL
- ◆ 15 0,25µm GOLD OVER NICKEL (RoHS)
- ◆ 80 5,08µm TIN OVER NICKEL (RoHS)
- ◆ 44 7,62µm SILVER OVER COPPER (RoHS)
- 50 7,62µm ELECTRO-SOLDER (60/40 SnPb)



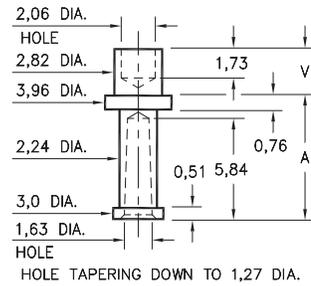
# MALE PCB PINS

## SOLDER TERMINALS VARIOUS TYPES

### 2709

2709-X-07-XX-00-00-07-0

Swage mount in 2,95 hole

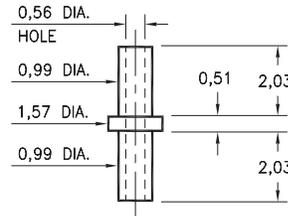


Basic Part Number	Board Thickness	Length V	Length A
2709-2	1,57	2,77	7,14
2709-3	2,39	3,58	6,35

### 2115

2115-2-00-XX-00-00-07-0

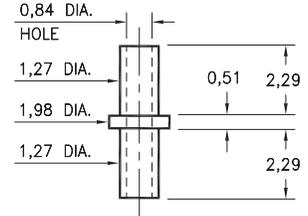
Swage mount in 1,09 hole  
For a 1,57 thick board



### 2326

2326-2-00-XX-00-00-07-0

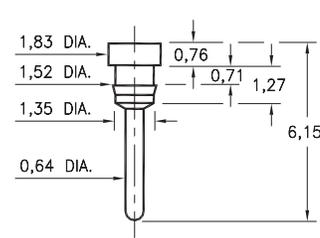
Swage mount in 1,40 hole  
For a 1,57 thick board



### 8831

8831-0-00-XX-00-00-03-0

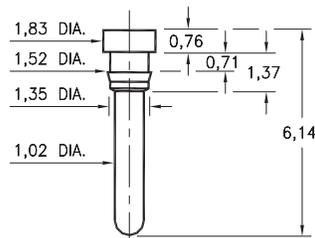
Press-fit in 1,45 mounting hole



### 8835

8835-0-00-XX-00-00-03-0

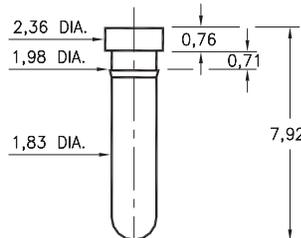
Press-fit in 1,45 mounting hole



### 8836

8836-0-00-XX-00-00-03-0

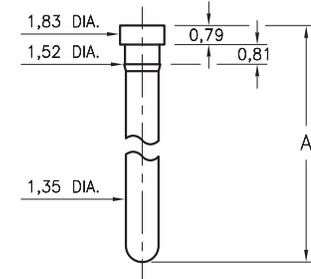
Press-fit in 1,91 mounting hole



### 0912/7912

X912-0-00-XX-00-00-03-0

Press-fit in 1,45 mounting hole

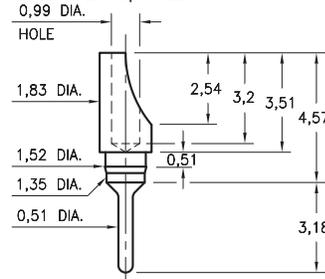


Basic Part Number	Pin Length A
0912-0	7,95
7912-0	12,95

### 3080

3080-0-01-XX-00-00-03-0

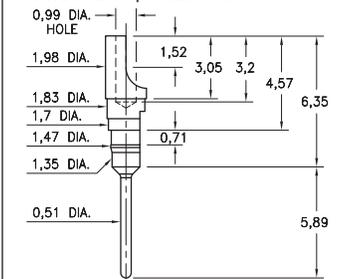
Press-fit in 1,45 mounting hole  
For wire sizes up to 22 AWG



### 3180

3180-2-01-XX-00-00-03-0

Press-fit in 1,4 mounting hole  
For wire sizes up to 22 AWG



#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - XX - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08μm TIN/LEAD OVER NICKEL
- ◆ 80 5,08μm TIN OVER NICKEL (RoHS)
- ◆ 44 7,62μm SILVER OVER COPPER (RoHS)
- 50 7,62μm ELECTRO-SOLDER (60/40 SnPb)



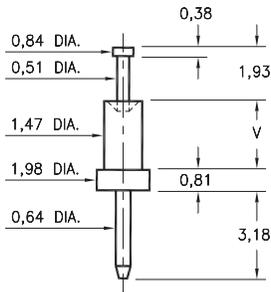
# MALE PCB PINS

## SOLDER TERMINALS PIN TYPE

### 2318

2318-X-00-XX-00-00-07-0

Swage mount in 1,57 hole

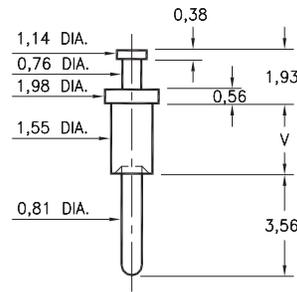


Basic Part Number	Board Thickness	Length V
2318-1	0,79	1,30
2318-2	1,57	2,08
2318-3	2,39	2,87

### 2309

2309-X-00-XX-00-00-07-0

Swage mount in 1,63 hole

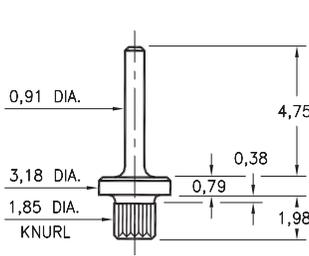


Basic Part Number	Board Thickness	Length V
2309-1	0,79	1,37
2309-2	1,57	2,13
2309-3	2,39	2,92
2309-4	3,18	3,73

### 2514

2514-2-00-XX-00-00-07-0

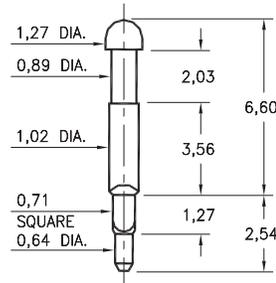
Press-fit in 1,78 mounting hole



### 8602

8602-1-00-XX-00-00-07-0

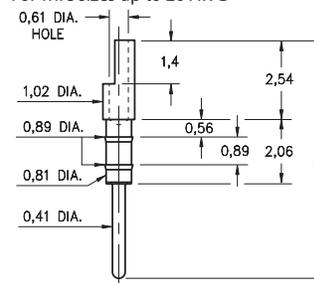
Square press-fit in 0,81 plated through-hole



### 3050

3050-X-01-XX-00-00-03-0

Press-fit in 0,81 mounting hole  
For wire sizes up to 26 AWG



Basic Part Number	Pin Length A
3050-0	7,7
3050-3	9,55

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



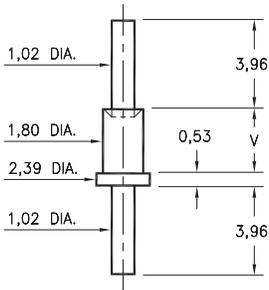
# MALE PCB PINS

## SOLDER TERMINALS PIN TYPE

### 2319

2319-X-00-XX-00-00-07-0

Swage mount in 1,93 hole

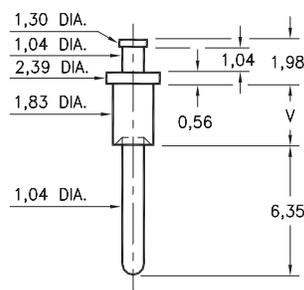


Basic Part Number	Board Thickness	Length V
2319-1	0,79	1,30
2319-2	1,57	2,08
2319-3	2,39	2,87

### 2313

2313-X-00-XX-00-00-07-0

Swage mount in 1,93 hole

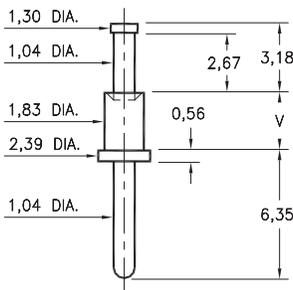


Basic Part Number	Board Thickness	Length V
2313-1	0,79	1,30
2313-2	1,57	2,13
2313-3	2,39	2,87
2313-4	3,18	3,68

### 2321

2321-X-00-XX-00-00-07-0

Swage mount in 1,93 hole

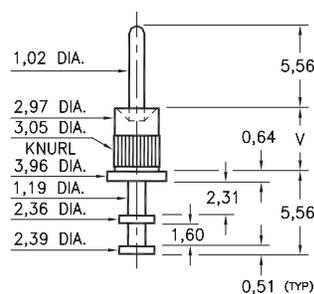


Basic Part Number	Board Thickness	Length V
2321-1	0,79	1,30
2321-2	1,57	2,08
2321-3	2,39	2,87
2321-4	3,18	3,68

### 2706

2706-X-00-XX-00-00-07-0

Swage mount in 3,05 hole

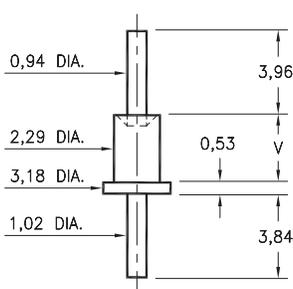


Basic Part Number	Board Thickness	Length V
2706-1	0,79	1,60
2706-2	1,57	2,36
2706-3	2,39	3,18
2706-4	3,18	3,96

### 2530

2530-X-00-XX-00-00-07-0

Swage mount in 2,39 hole

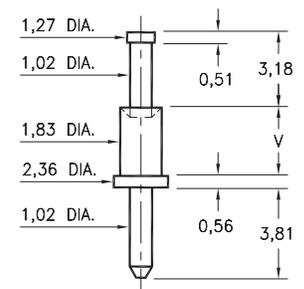


Basic Part Number	Board Thickness	Length V
2530-2	1,57	2,39
2530-3	2,39	3,18
2530-4	3,18	3,96

### 3156

3156-X-00-XX-00-00-08-0

Swage mount in 1,93 hole



Basic Part Number	Board Thickness	Length V
3156-1	0,79	1,30
3156-2	1,57	2,08
3156-3	2,39	2,87
3156-4	3,18	3,68

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Swage pins are annealed)

**Dimensions:** Millimeters

**Tolerances On:** Lengths:  $\pm 0,13$   
Diameters:  $\pm 0,051$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 5,08 $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 5,08 $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 44 7,62 $\mu$ m SILVER OVER COPPER (RoHS)
- 50 7,62 $\mu$ m ELECTRO-SOLDER  
(60/40 SnPb)



# CUSTOM PRODUCT WORKSHEET

PHOTOCOPY THIS PAGE AND FAX, SCAN OR E-MAIL TO MILL-MAX FOR A PROMPT QUOTATION

Mill-Max Mfg. Corp., P.O. Box 300, 190 Pine Hollow Road, Oyster Bay, NY 11771-0300 [www.mill-max.com](http://www.mill-max.com)

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
 \_\_\_\_\_ EMAIL: \_\_\_\_\_

QUANTITIES TO QUOTE: \_\_\_\_\_

### SPECIFICATIONS OF MACHINED PINS, TERMINALS, RECEPTACLE SHELLS, INSULATORS, etc.

SIMILAR MILL-MAX PART #: \_\_\_\_\_

- PIN MATERIAL:  BRASS  
 PHOSPHOR BRONZE  
 TELLURIUM COPPER  
 INSULATOR MATERIAL:  FR-4 EPOXY  
 HIGH TEMP. THERMOPLASTIC

( Check available stock sizes on page 263 )

- PIN FINISH:  TIN over NICKEL  
 TIN/LEAD over NICKEL  
 \_\_\_\_\_  $\mu$ m GOLD over NICKEL  
 SILVER over COPPER  
 OTHER: \_\_\_\_\_

STANDARD MACHINING TOLERANCES ARE  $\pm 0,051$  FOR DIAMETERS,  $\pm 0,13$  FOR LENGTHS. IF TIGHTER TOLERANCES ARE REQUIRED, PLEASE SPECIFY CRITICAL DIMENSIONS ON SKETCH BELOW.

### ADDITIONAL SPECIFICATIONS FOR RECEPTACLE ONLY:

SIZE OF MATING PIN OR COMPONENT LEAD: \_\_\_\_\_  
 ( round/square/rectangular )

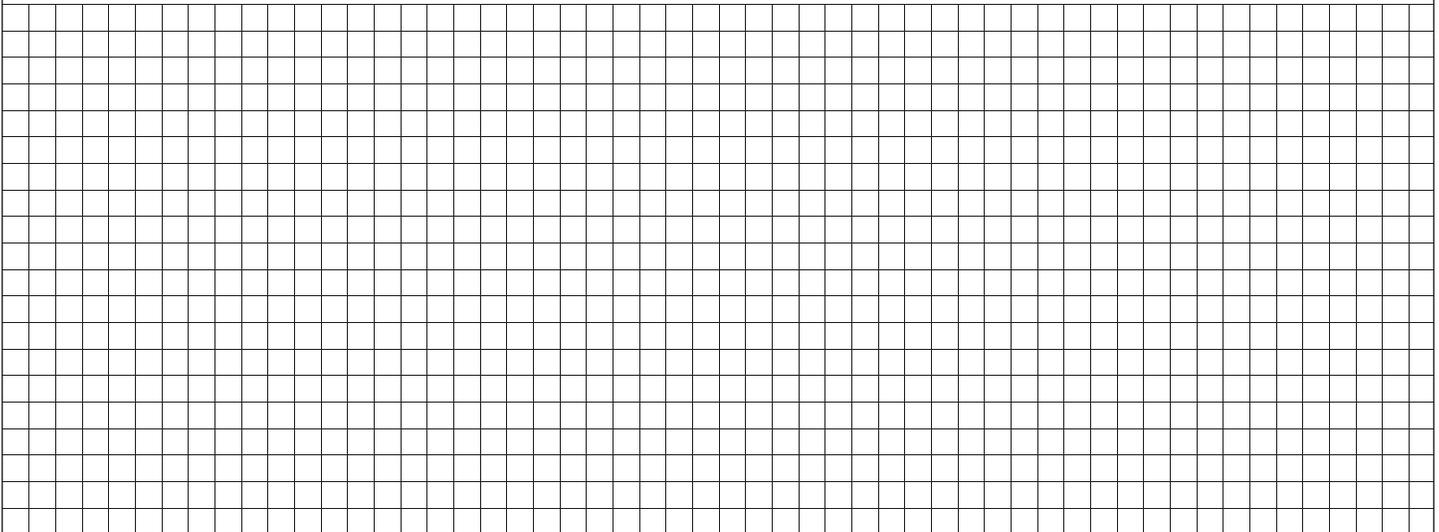
LENGTH OF MATING PIN/LEAD: \_\_\_\_\_

USE MILL-MAX CONTACT TYPE#: \_\_\_\_\_  
 ( See page 248 for selector chart )

REQUIRED INSERTION/EXTRACTION FORCES:  LOW  MEDIUM  HIGH

CONTACT FINISH:  TIN over NICKEL  
 \_\_\_\_\_  $\mu$ m GOLD over NICKEL  
 OTHER: \_\_\_\_\_

ARE THERE ANY UNUSUAL REQUIREMENTS SUCH AS HIGH OPERATING TEMPERATURE OR CURRENT RATING? \_\_\_\_\_



IF YOU NEED ASSISTANCE, PLEASE CALL MILL-MAX AND ASK FOR AN APPLICATIONS ENGINEER



Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • [www.mill-max.com](http://www.mill-max.com)

# GENERAL CONTACT INFO

## THE "MULTI-FINGER" CONTACT

Mill-Max makes pin receptacles by press-fitting a "multi-finger" spring contact into a machined shell. A selection of over 39 contact types are pre-tooled for those who wish to design custom receptacles. This extensive family of contacts will accept round pins ranging from 0,20 to 2,59 diameter, as well as rectangular component leads and square wrapposts, where the effective diameter is taken as the diagonal dimension of the lead.

Many contacts are interchangeable within a given shell, and so the contact selector chart has been organized by alternate contact groupings. Standard receptacles found in this catalog can be easily assembled with alternate contacts to suit special applications, for example: low insertion force or high operating temperature.

Contact Groups	Contact Type	Accepts Minimum Pin Diameter	Accepts Maximum Pin Diameter	Contact Compliancy $\delta$	Contact Length	Number of Fingers	Contact Material	Current Rating (For 10°C $\Delta T$ )
No Alternate	#04	0,20	0,33	0,08	1,35	3	BeCu	2A
No Alternate	#10	0,30	0,43	0,05	1,52	6		
A	#09	0,38	0,46	0,05	1,30	3	BeCu	3A
	#11		0,51	0,08	1,91			
	#21		0,56	0,10	1,57	4		
	#31	0,46	0,58		1,91	3		
	#05	0,38	0,56		0,08	1,57		
	#25		0,51	0,08	1,91	3		
#12	0,56		0,08	1,57	4			
B	#22	0,38	0,64	0,13	1,57	6	BeCu	4.5A
C	#30			0,10	2,11	4	BeNi	
	#38			0,10				
	#32			0,23		6		
	#35	0,20						
#43	0,20							
K	#15	0,51	0,81	0,13	2,13	4	BeNi	4.5A
#19	0,08			2,87	4		BeCu	
D	#06	0,56	0,86			0,18	2,11	6
	#26			0,13				
	#16	0,64	0,94	0,15	2,11	6	BeCu	
	#47			0,28				
#56	0,23							
L	#18	0,94	1,09	0,10	1,57	6	BeCu	11.2A
	#58			0,08				
E	#36	0,56	1,07	0,56	3,05	4	BeCu	8A
	#34	0,81	1,17	0,25	3,05			
	#49			0,15	3,18		BeNi	
	#24			0,23	3,05			
F	#02	1,02	1,27	0,15	2,24	6	BeCu	20A
#28	1,07	1,32	0,13	3,81				
J	#42	1,49	1,60		0,10	3,81	4	BeCu
	#03	1,02	1,52	0,25				
G	#23	1,14	1,65	0,20	2,54	6	BeCu	15A
	#13	1,22	1,63	0,25	3,23	4		
	#33			0,20				
H	#07	1,65	2,08	0,33	3,81	4	BeCu	15A
	#27			0,30			BeNi	
	#14			2,16			0,36	
No Alternate	#08	2,13	2,59	0,28	3,10	6	BeCu	18A
No Alternate	#48	0,94	1,09	TBD	2,34	4	BeCu	20A



# GENERAL CONTACT INFO

## CONTACT SPECIFICATIONS

The Mill-Max “multi-finger” contact exhibits wide conformity, eg. the ability of any single contact to accept a broad range of round pins as well as rectangular or square leads.

The insertion/extraction force characteristics that follow were derived using 0,76µm gold-plated contacts and bullet-shaped polished steel, gauge pins. The curves represent typical average values. The charts only guide you in selecting a clip that is close to your specification. Your results may vary, so for your specification, **visit [www.mill-max.com](http://www.mill-max.com) to obtain complimentary samples of a receptacle assembly for your evaluation.**

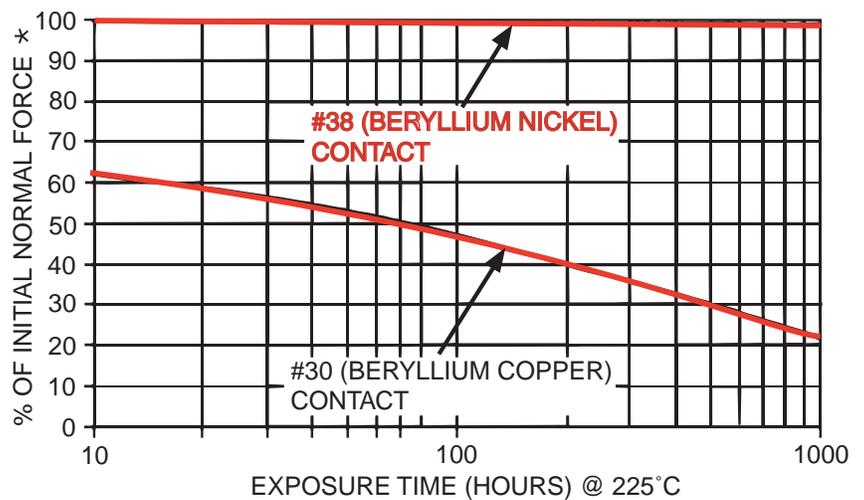
### COMPLIANCY ( $\delta$ )

The compliancy factor ( $\delta$ ) describes the re-configured operating range after inserting the largest permissible mating pin.

For example: the # 34 contact has an initial operating range from 0,81 to 1,17 diameter pins. After insertion of a 1,17 pin, the contact is sized, and the minimum pin acceptance becomes  $1,17 - 0,25 = 0,91$ . Thus, the new operating range becomes 0,91 to 1,17.

### CONTACT MATERIAL AND STRESS RELAXATION AT HIGH TEMPERATURE

Mill-Max Mfg. contacts are made from either beryllium copper or beryllium nickel that has been heat treated to achieve ultimate spring properties. The graph illustrates how beryllium copper loses its spring properties over time at a high temperature (225°C). Thus, for burn-in applications and continuous operation above 150°C, beryllium nickel should be substituted for beryllium copper.



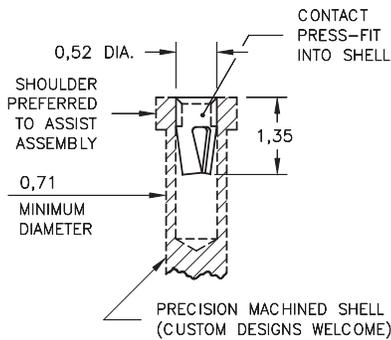
# CONTACT DATA

## INSERTION / EXTRACTION FORCE GRAPHS

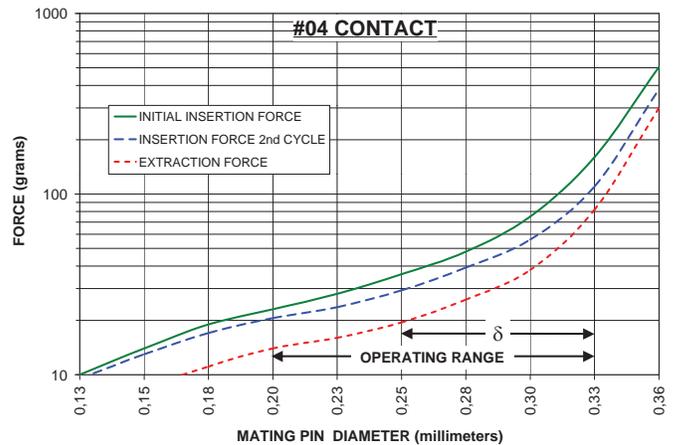
### #04 CONTACT

FOR 0,20 - 0,33 DIAMETER PINS ( $\delta = 0,08$ )  
3-FINGER

( See page 248 )



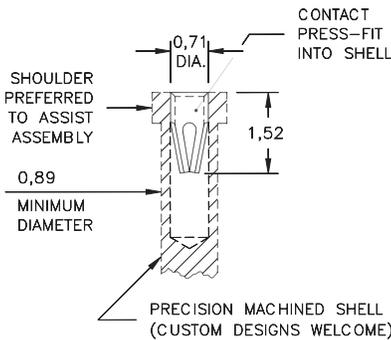
**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



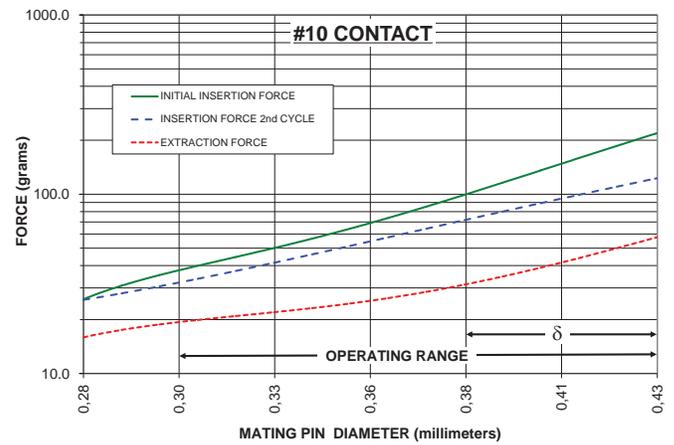
### #10 CONTACT

FOR 0,30 - 0,43 DIAMETER PINS ( $\delta = 0,05$ )  
6-FINGER

( See page 248 )



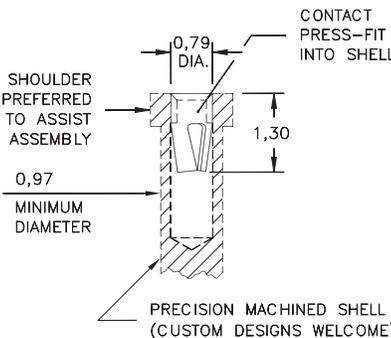
**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



### #09 CONTACT

FOR 0,38 - 0,46 DIAMETER PINS ( $\delta = 0,05$ )  
3-FINGER, GROUP A

( See page 248 )



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

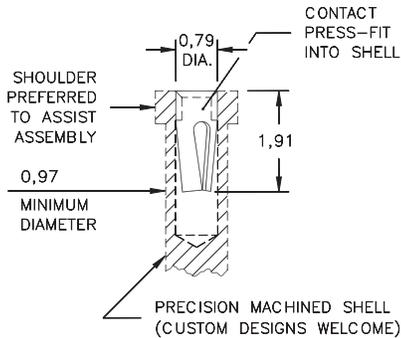


# CONTACT DATA

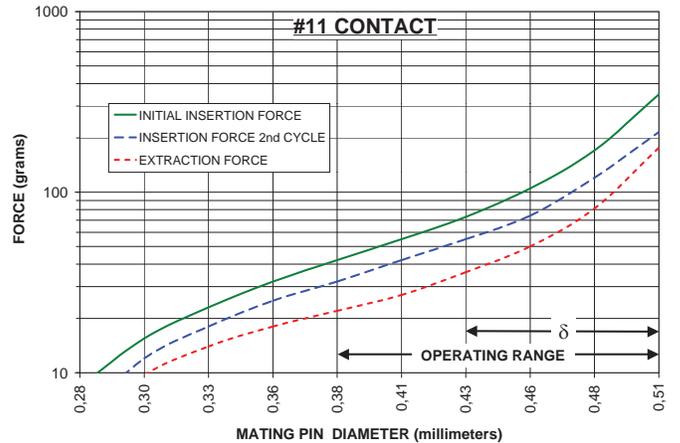
## INSERTION / EXTRACTION FORCE GRAPHS

### #11 CONTACT

FOR 0,38 - 0,51 DIAMETER PINS ( $\delta = 0,08$ )  
3-FINGER, GROUP A (See page 248)

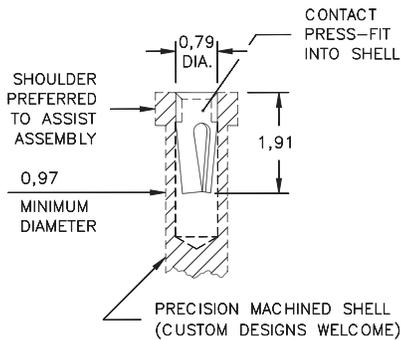


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

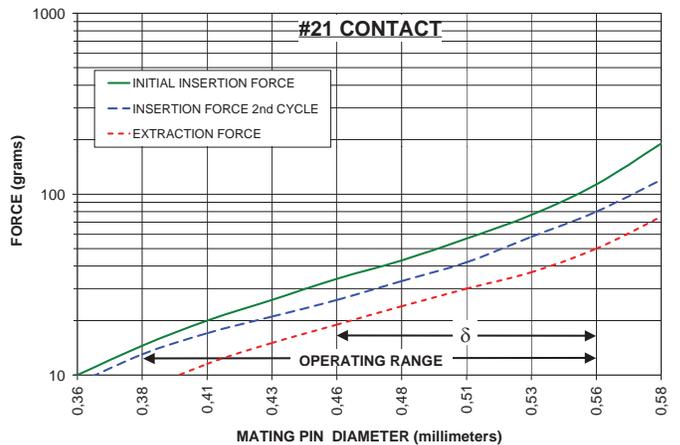


### #21 CONTACT

FOR 0,38 - 0,56 DIAMETER PINS ( $\delta = 0,10$ )  
3-FINGER, GROUP A (See page 248)

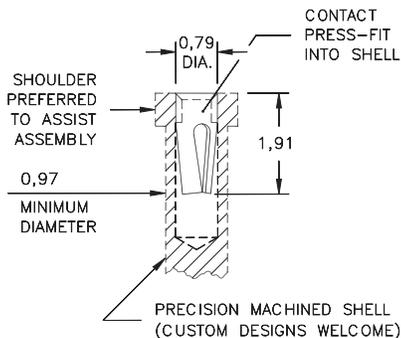


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

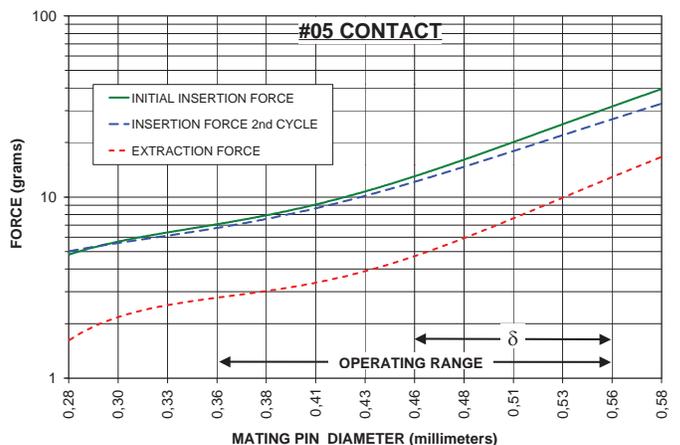


### #05 CONTACT

FOR 0,38 - 0,56 DIAMETER PINS ( $\delta = 0,10$ )  
3-FINGER, GROUP A (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

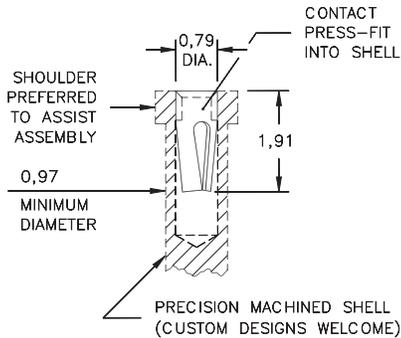


# CONTACT DATA

## INSERTION / EXTRACTION FORCE GRAPHS

### #25 CONTACT

FOR 0,38 - 0,51 DIAMETER PINS ( $\delta = 0,08$ )  
3-FINGER, GROUP A (See page 248)

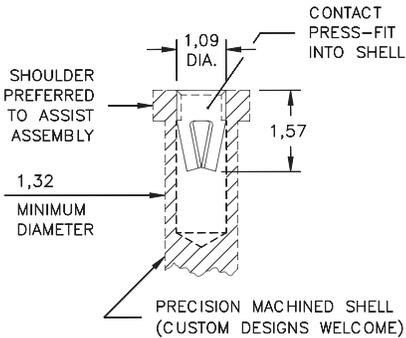


**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated

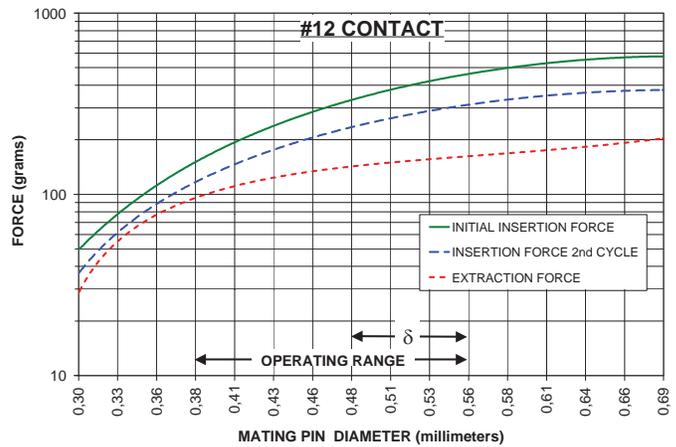


### #12 CONTACT

FOR 0,38 - 0,56 DIAMETER PINS ( $\delta = 0,08$ )  
4-FINGER, GROUP B (See page 248)

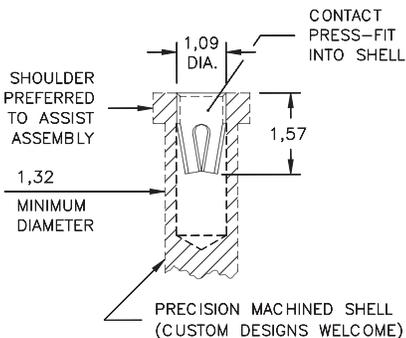


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

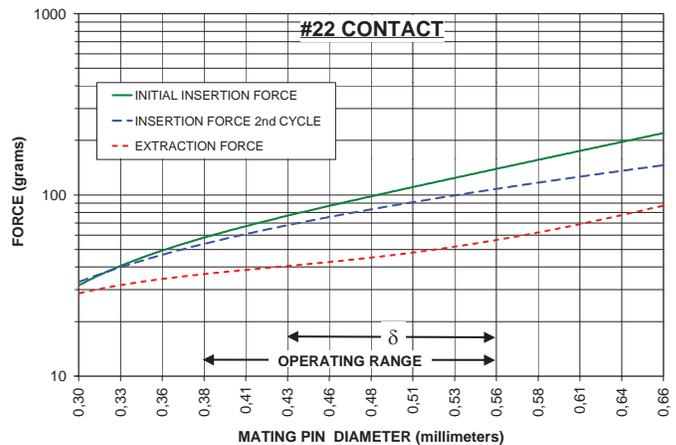


### #22 CONTACT

FOR 0,38 - 0,56 DIAMETER PINS ( $\delta = 0,13$ )  
6-FINGER, GROUP B (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

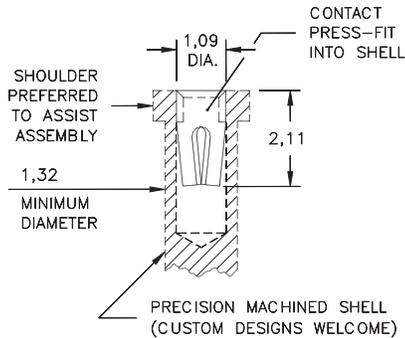


# CONTACT DATA

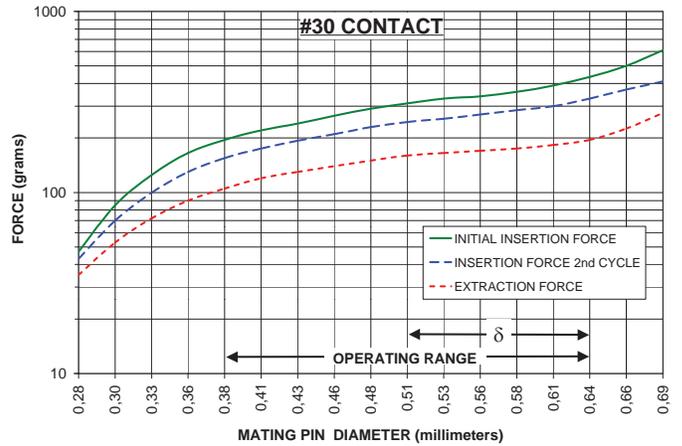
## INSERTION / EXTRACTION FORCE GRAPHS

### #30 CONTACT

FOR 0,38 - 0,64 DIAMETER PINS ( $\delta = 0,13$ )  
4-FINGER, GROUP C (See page 248)

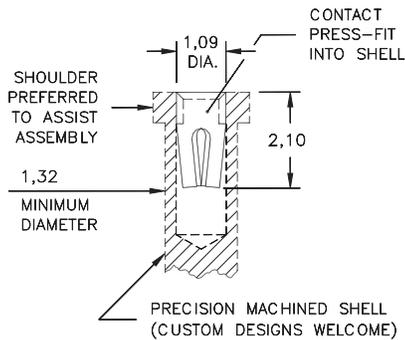


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

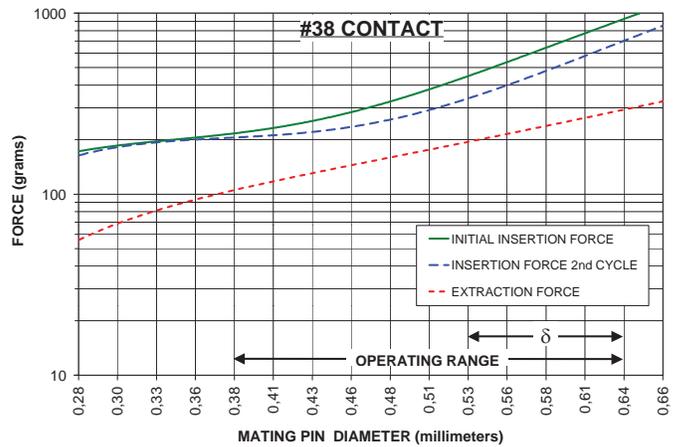


### #38 CONTACT

FOR 0,38 - 0,64 DIAMETER PINS ( $\delta = 0,10$ )  
4-FINGER, GROUP C (See page 248)

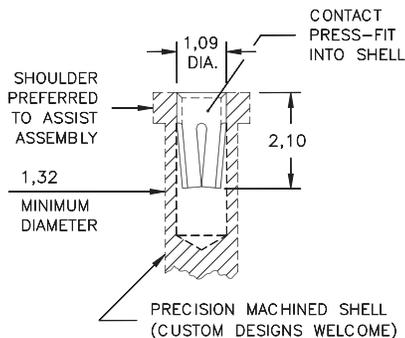


**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated

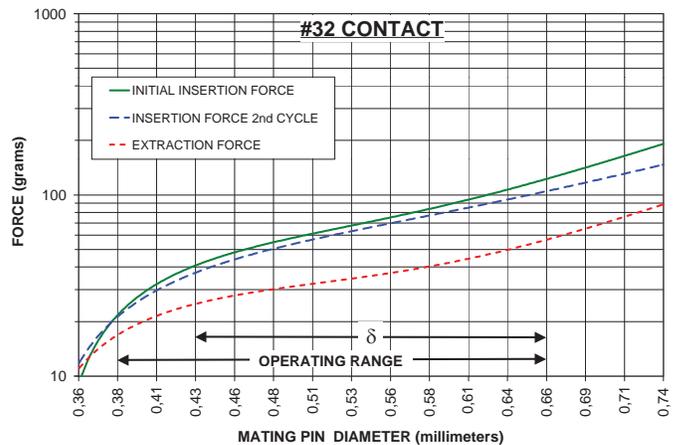


### #32 CONTACT

FOR 0,38 - 0,66 DIAMETER PINS ( $\delta = 0,23$ )  
6-FINGER, GROUP C (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

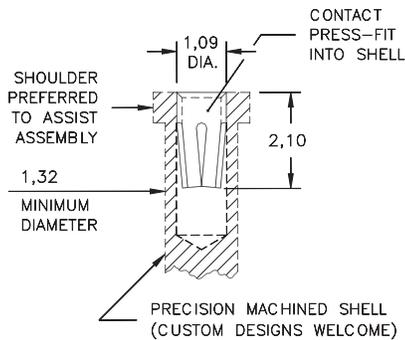


# CONTACT DATA

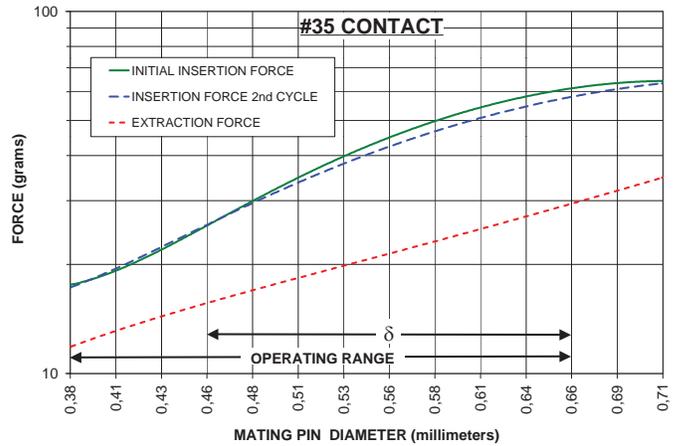
## INSERTION / EXTRACTION FORCE GRAPHS

### #35 CONTACT

FOR 0,38 - 0,66 DIAMETER PINS ( $\delta = 0,20$ )  
6-FINGER, GROUP C (See page 248)

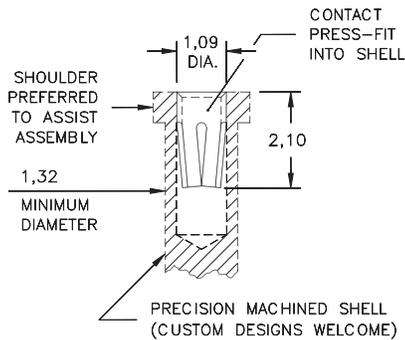


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

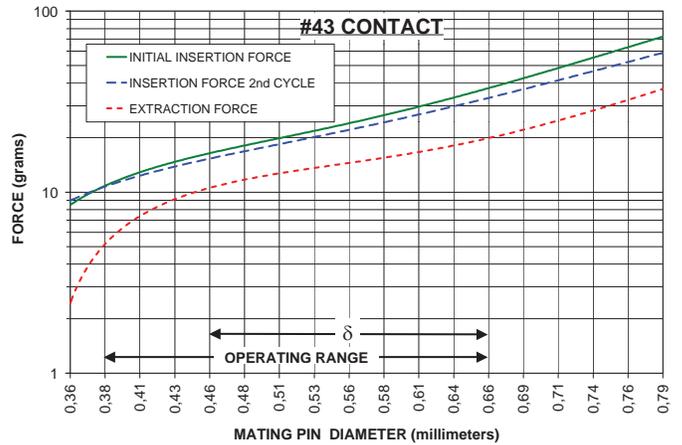


### #43 CONTACT

FOR 0,38 - 0,66 DIAMETER PINS ( $\delta = 0,20$ )  
6-FINGER, GROUP C (See page 248)

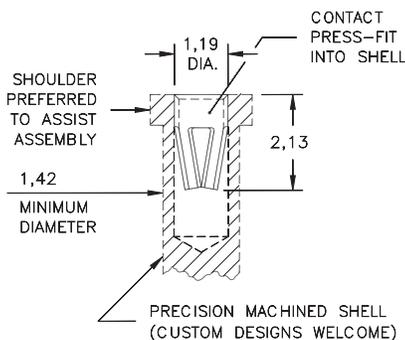


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



### #15 CONTACT

FOR 0,51 - 0,81 DIAMETER PINS ( $\delta = 0,13$ )  
6-FINGER, GROUP K (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

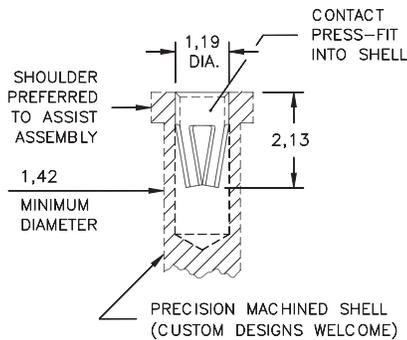


# CONTACT DATA

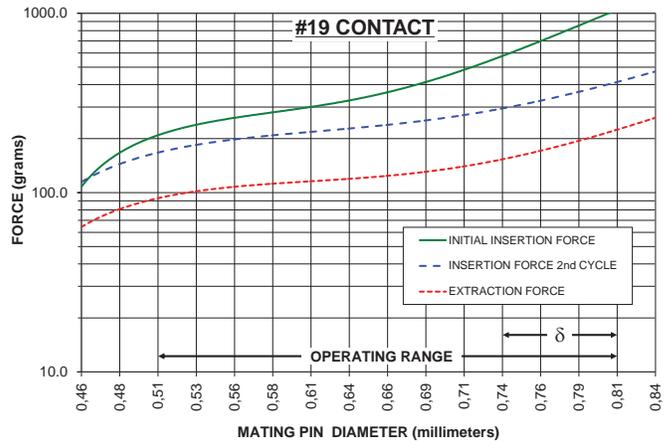
## INSERTION / EXTRACTION FORCE GRAPHS

### #19 CONTACT

FOR 0,51 - 0,81 DIAMETER PINS ( $\delta = 0,08$ )  
6-FINGER, GROUP K (See page 248)

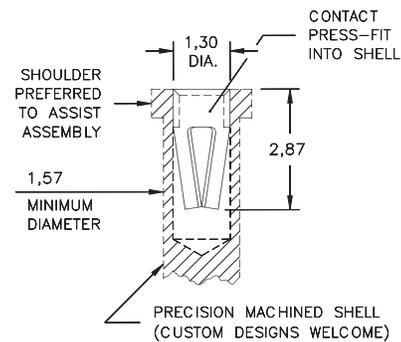


**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated

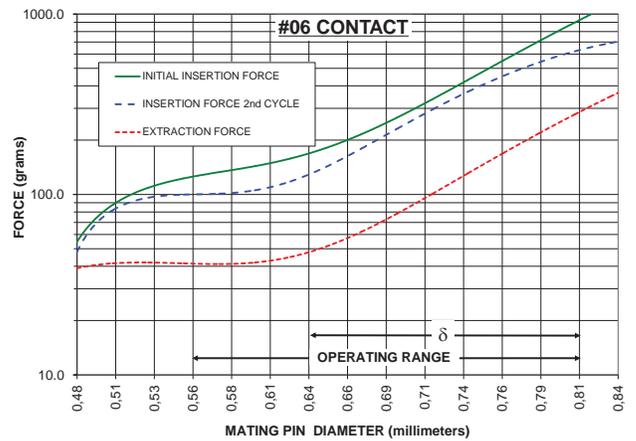


### #06 CONTACT

FOR 0,56 - 0,81 DIAMETER PINS ( $\delta = 0,18$ )  
4-FINGER, GROUP D (See page 248)

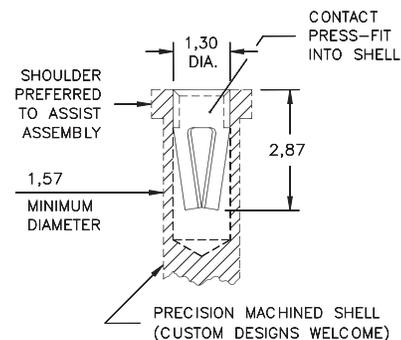


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

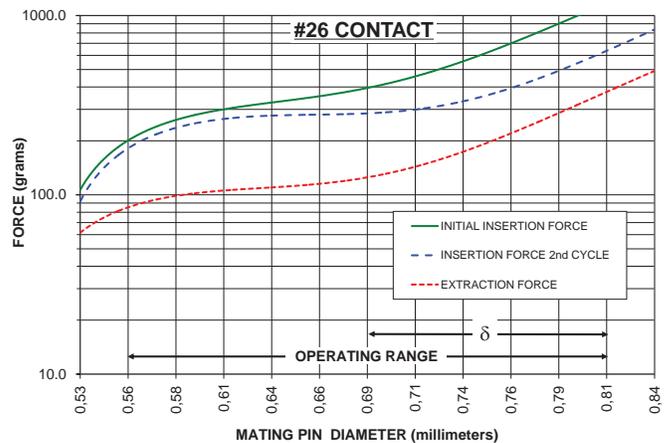


### #26 CONTACT

FOR 0,56 - 0,81 DIAMETER PINS ( $\delta = 0,13$ )  
4-FINGER, GROUP D (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

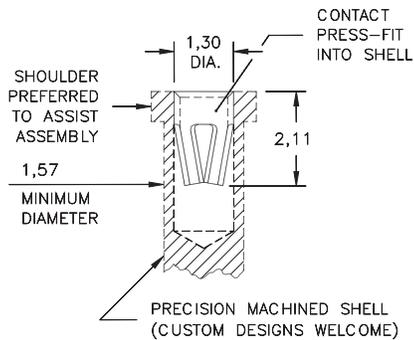


# CONTACT DATA

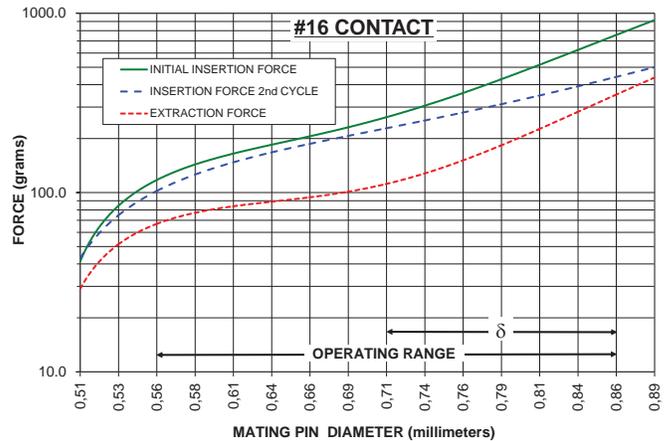
## INSERTION / EXTRACTION FORCE GRAPHS

### #16 CONTACT

FOR 0,56 - 0,86 DIA. & 0,64 SQ. ( $\delta = 0,15$ )  
6-FINGER, GROUP D (See page 248)

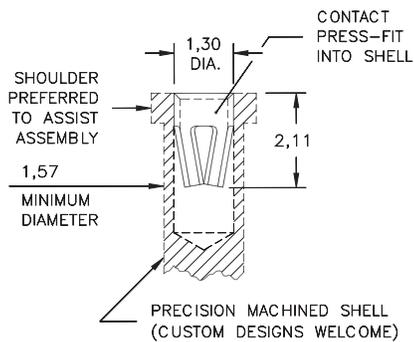


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

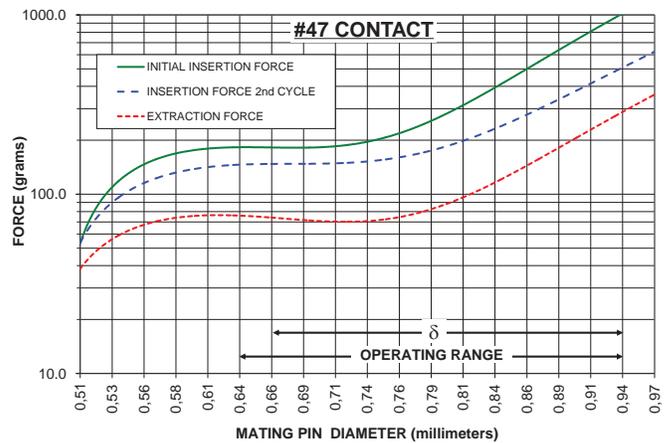


### #47 CONTACT

FOR 0,64 - 0,94 DIA. & 0,64 SQ. ( $\delta = 0,28$ )  
6-FINGER, GROUP D (See page 248)

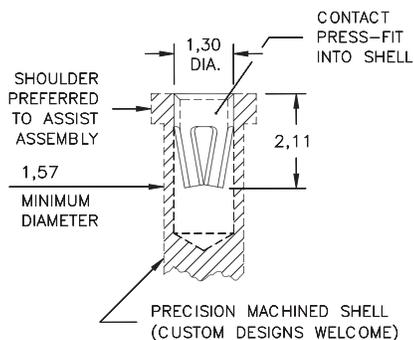


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

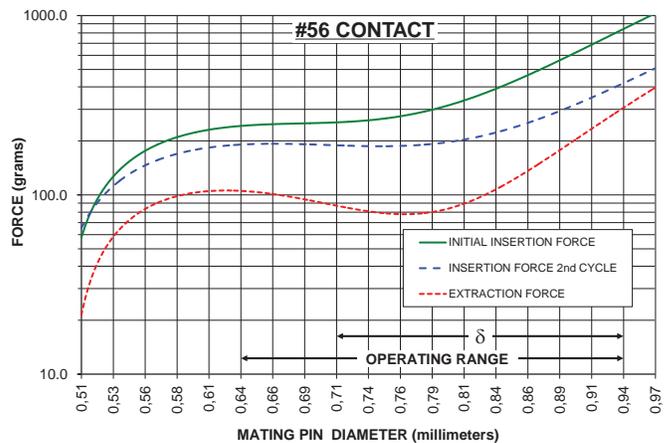


### #56 CONTACT

FOR 0,64 - 0,94 DIA. & 0,64 SQ. ( $\delta = 0,23$ )  
6-FINGER, GROUP D (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

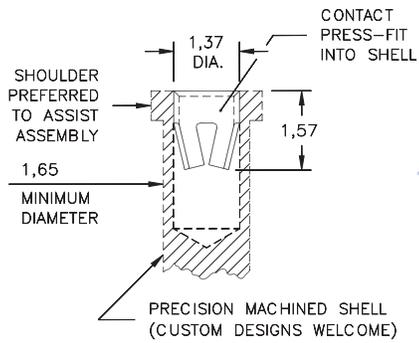


# CONTACT DATA

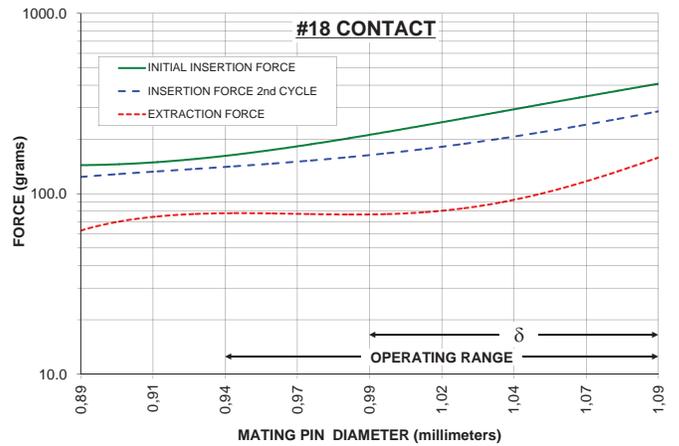
## INSERTION / EXTRACTION FORCE GRAPHS

### #18 CONTACT

FOR 0,94 - 1,09 DIAMETER PINS ( $\delta = 0,08$ )  
6-FINGER, GROUP L (See page 248)

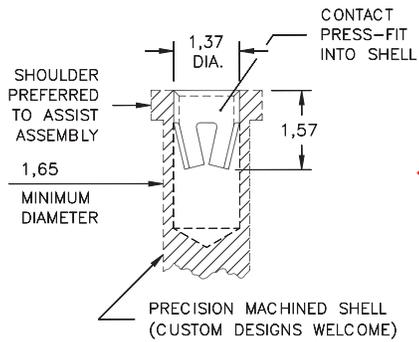


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

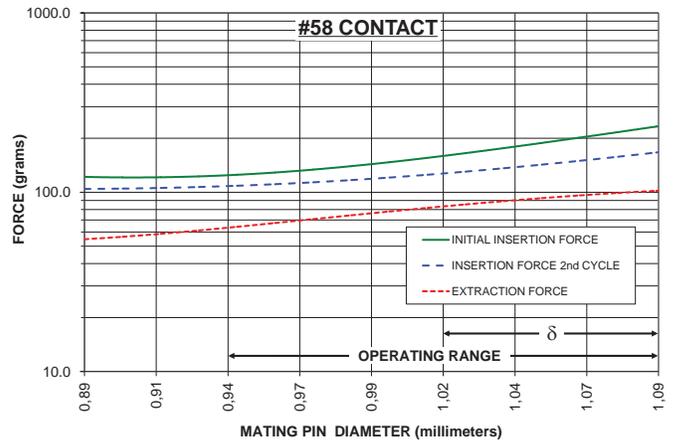


### #58 CONTACT

FOR 0,94 - 1,09 DIAMETER PINS ( $\delta = 0,08$ )  
6-FINGER, GROUP L (See page 248)

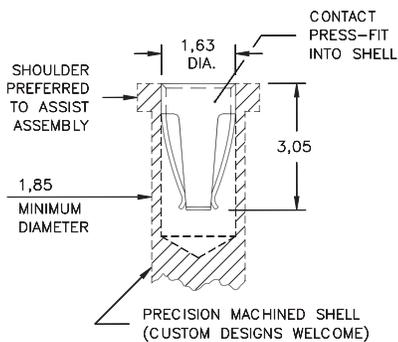


**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated

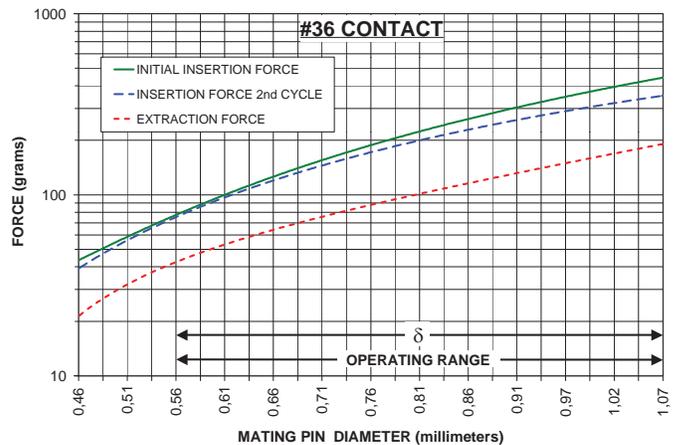


### #36 CONTACT

FOR 0,56 - 1,07 DIAMETER PINS ( $\delta = 0,56$ )  
4-FINGER, GROUP E (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

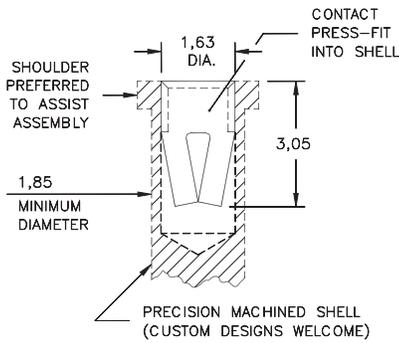


# CONTACT DATA

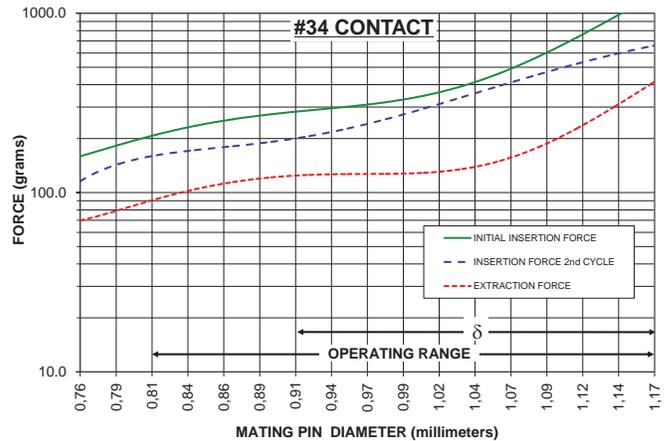
## INSERTION / EXTRACTION FORCE GRAPHS

### #34 CONTACT

FOR 0,81 - 1,17 DIAMETER PINS ( $\delta = 0,25$ )  
4-FINGER, GROUP E (See page 248)

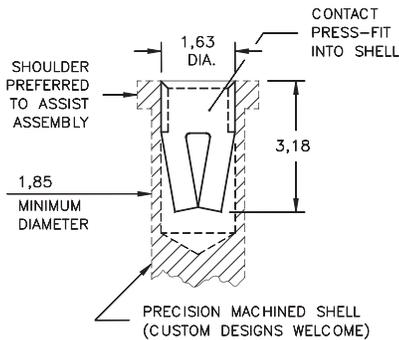


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



### #49 CONTACT

FOR 0,81 - 1,17 DIAMETER PINS ( $\delta = 0,15$ )  
4-FINGER, GROUP E (See page 248)

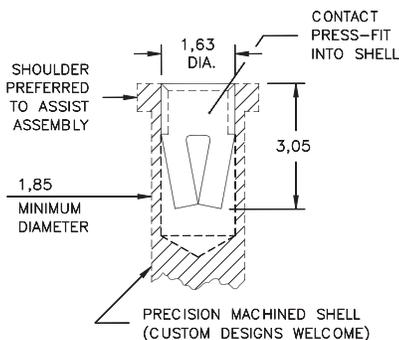


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

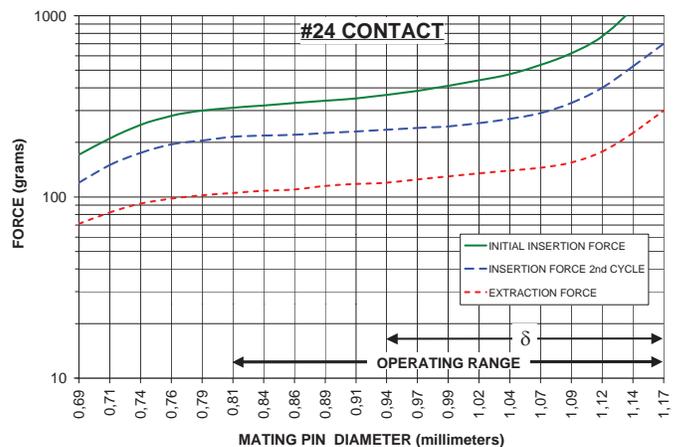


### #24 CONTACT

FOR 0,81 - 1,17 DIAMETER PINS ( $\delta = 0,23$ )  
4-FINGER, GROUP E (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

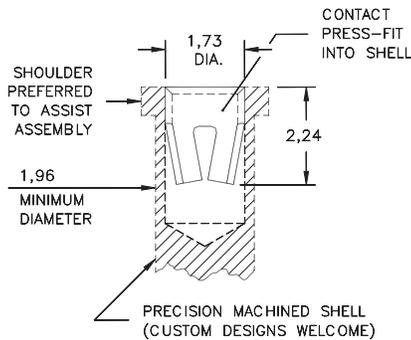


# CONTACT DATA

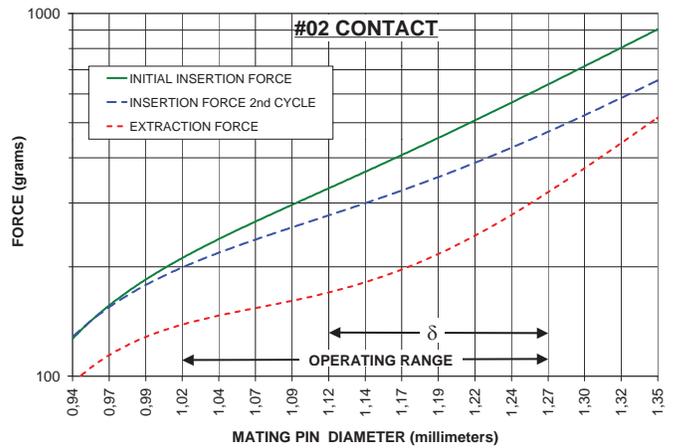
## INSERTION / EXTRACTION FORCE GRAPHS

### #02 CONTACT

FOR 1,02 - 1,27 DIAMETER PINS ( $\delta = 0,15$ )  
6-FINGER, GROUP F (See page 248)

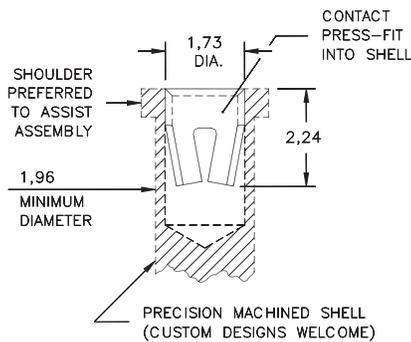


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

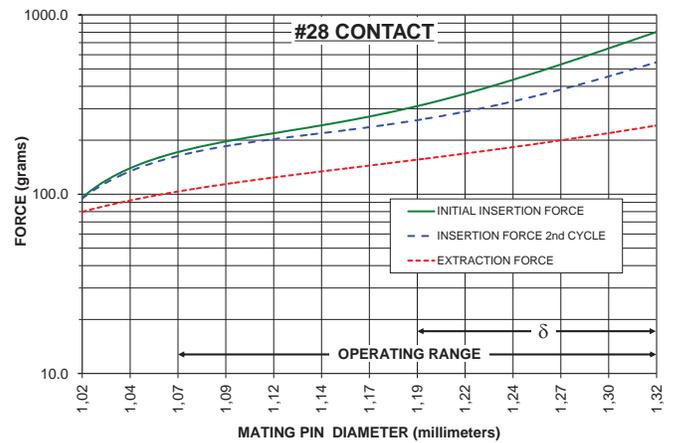


### #28 CONTACT

FOR 1,07 - 1,32 DIAMETER PINS ( $\delta = 0,13$ )  
6-FINGER, GROUP F (See page 248)

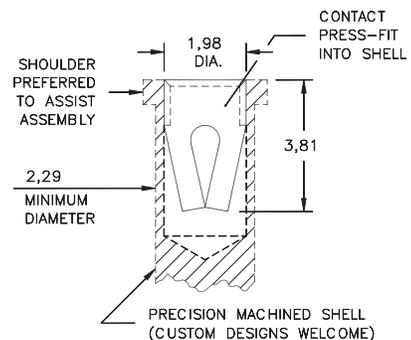


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

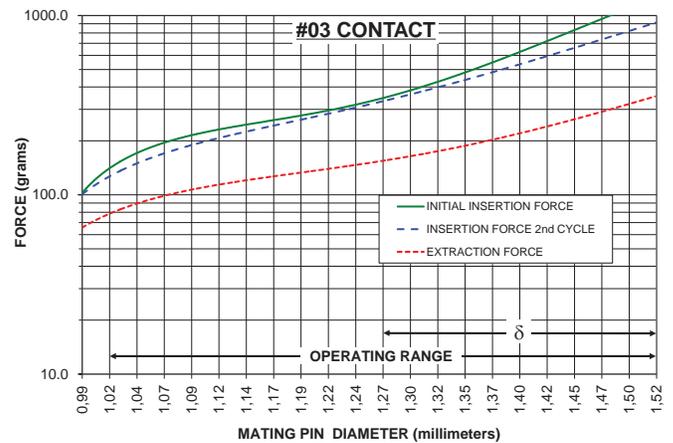


### #03 CONTACT

FOR 1,02 - 1,52 DIAMETER PINS ( $\delta = 0,25$ )  
4-FINGER, GROUP J (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

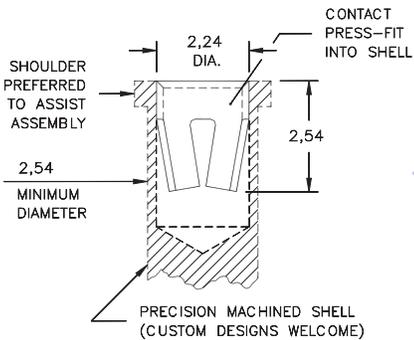


# CONTACT DATA

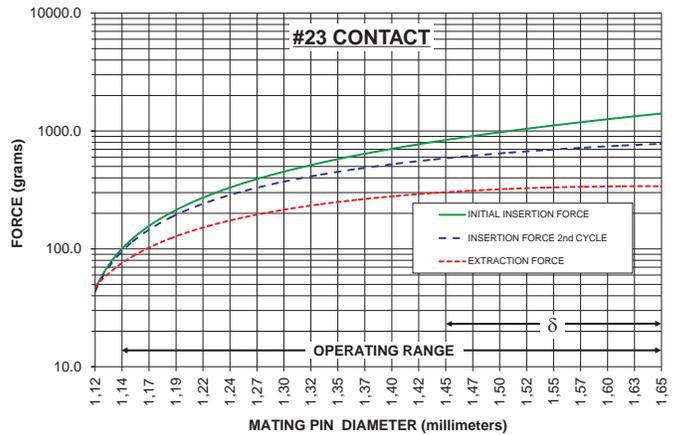
## INSERTION / EXTRACTION FORCE GRAPHS

### #23 CONTACT

FOR 1,14 - 1,65 DIAMETER PINS ( $\delta = 0,20$ )  
6-FINGER, GROUP G (See page 248)

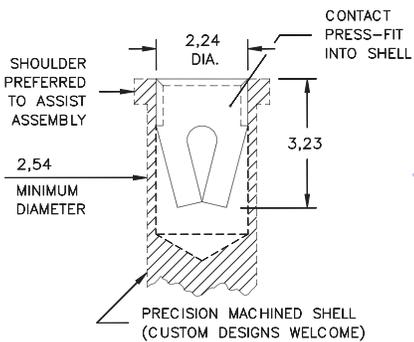


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

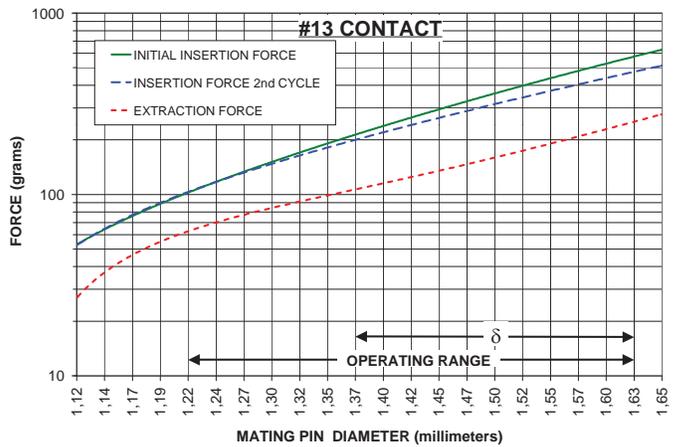


### #13 CONTACT

FOR 1,22 - 1,63 DIAMETER PINS ( $\delta = 0,25$ )  
4-FINGER, GROUP G (See page 248)

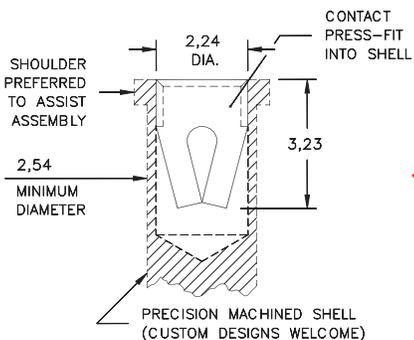


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

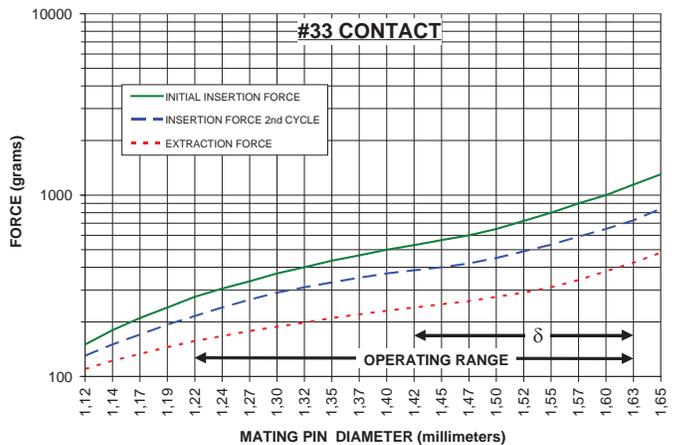


### #33 CONTACT

FOR 1,22 - 1,63 DIAMETER PINS ( $\delta = 0,20$ )  
4-FINGER, GROUP G (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

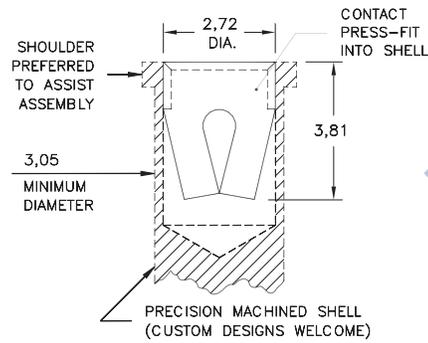


# CONTACT DATA

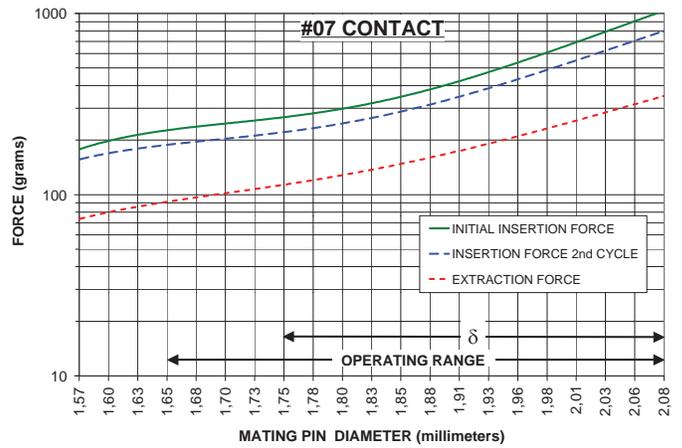
## INSERTION / EXTRACTION FORCE GRAPHS

### #07 CONTACT

FOR 1,65 - 2,08 DIAMETER PINS ( $\delta = 0,33$ )  
4-FINGER, GROUP H (See page 248)

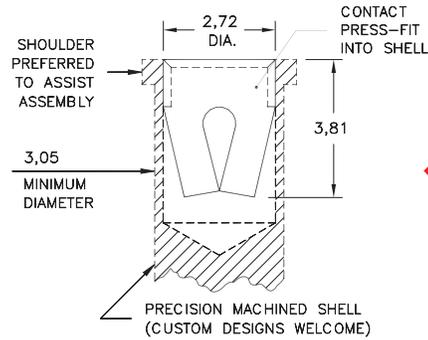


**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated

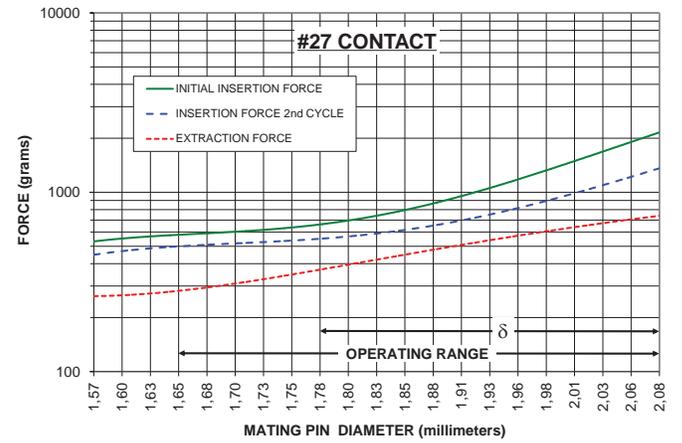


### #27 CONTACT

FOR 1,65 - 2,08 DIAMETER PINS ( $\delta = 0,30$ )  
4-FINGER, GROUP H (See page 248)

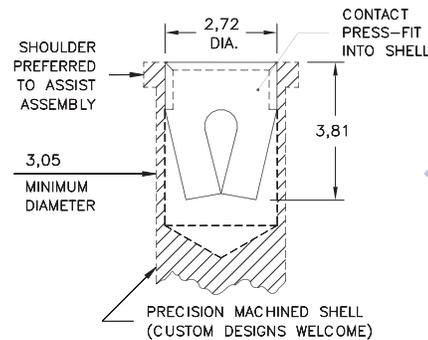


**CONTACT MATERIAL**  
BERYLLIUM NICKEL  
Alloy 360,  
Heat Treated

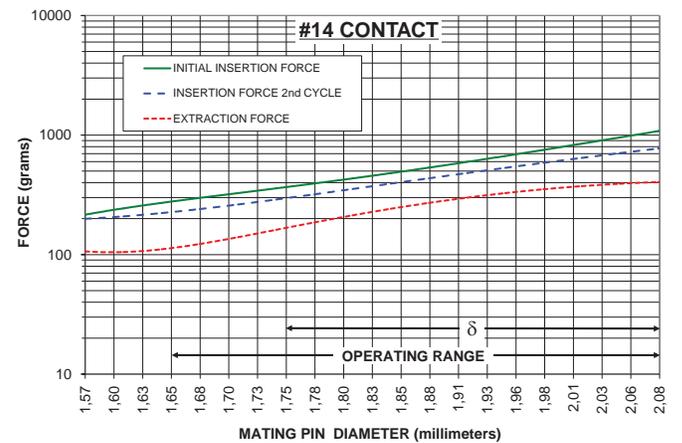


### #14 CONTACT

FOR 1,65 - 2,08 DIAMETER PINS ( $\delta = 0,36$ )  
4-FINGER, GROUP H (See page 248)



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.



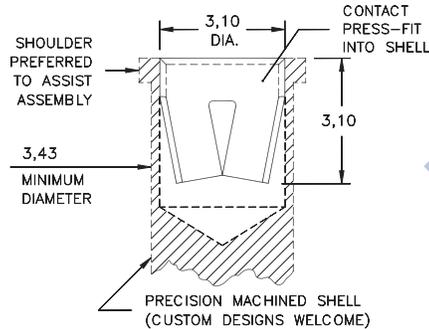
# CONTACT DATA

## INSERTION / EXTRACTION FORCE GRAPHS

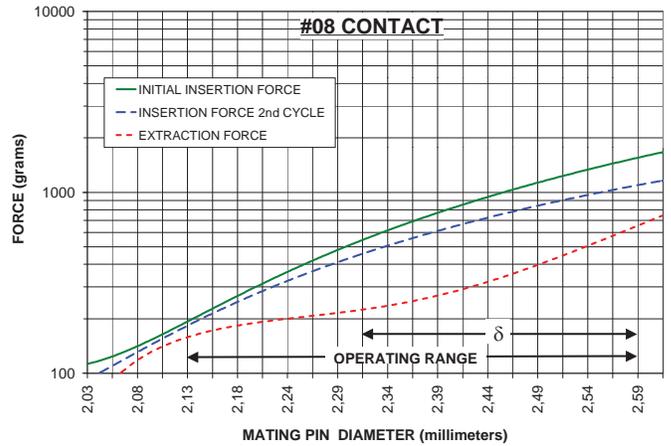
### #08 CONTACT

FOR 2,13 - 2,59 DIAMETER PINS ( $\delta = 0,28$ )  
6-FINGER

( See page 248 )



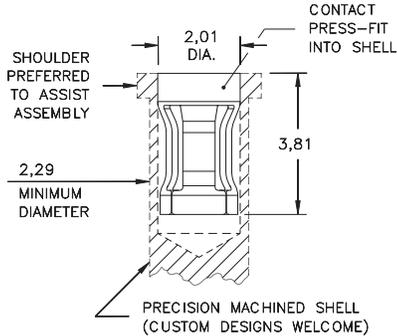
**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



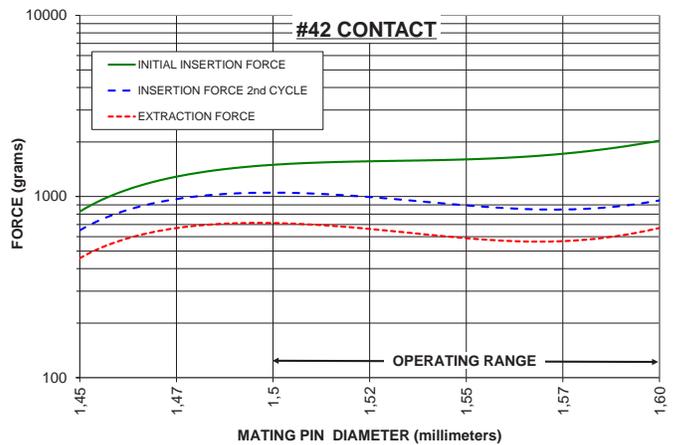
### #42 CONTACT

FOR 2,13 - 2,59 DIAMETER PINS  
4-FINGER, GROUP J

( See page 248 )



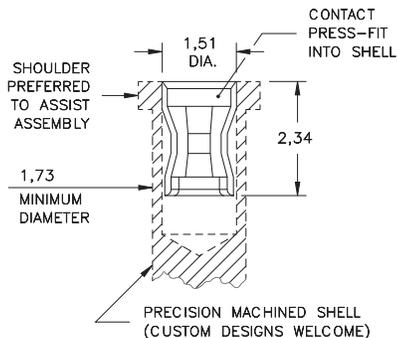
**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



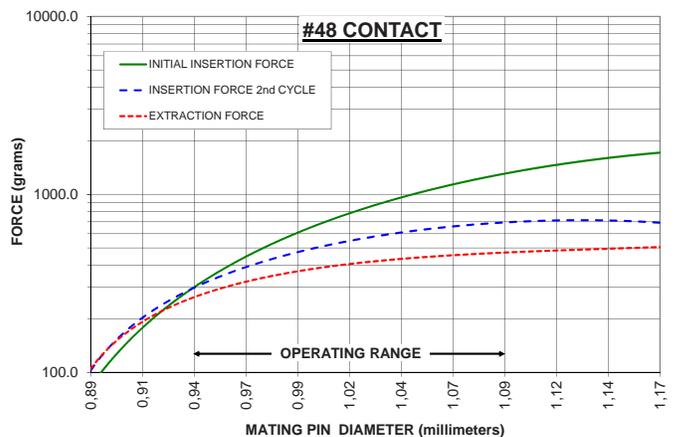
### #48 CONTACT

FOR 2,13 - 2,59 DIAMETER PINS  
4-FINGER

( See page 248 )



**CONTACT MATERIAL**  
BERYLLIUM COPPER  
Alloy 172,  
Heat Treated



The insertion / extraction force characteristics above were derived using a 0,76 micrometers gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.



## PROPERTIES OF METALS USED BY MILL-MAX

Copper alloy rod and wire for precision-machined pins, receptacles & solder terminals (**RoHS-2 directive 2011/65/EU, exemption 6c**) allows up to **4% lead as an alloy agent in copper. All Mill-Max pin materials are:**

**BRASS ALLOYS;** 360 per ASTM B 16, and 385 per ASTM B455

**PHOSPHOR BRONZE** Alloy 544 (UNS C54400) per ASTM B 139

**TELLURIUM COPPER** Alloy 145 (UNS C14500) per ASTM B 301

Spring alloy strip for stamping "multi-finger" spring contacts

**BERYLLIUM COPPER** Alloy 172 (UNS C17200) per ASTM B 194

**BERYLLIUM NICKEL** Alloy 360 (UNS N03360)

### Properties of BRASS Alloy 360 ASTM B 16:

Chemical composition: Cu 63% (max), Pb 3.7% (max), Fe .35% (max), Zn remainder

Temper as machined: H02/H04

Yield Strength: 25-45 ksi

Tensile strength: 57-80 ksi

Hardness as machined: 80-90 Rockwell B

After machining, brass parts are often annealed (softened) for subsequent bending, swaging or crimping. A partial anneal down to 60±10 RB is recommended for 90° bends, a full anneal down to 35±15 RB is recommended for pins or terminals that are swaged (riveted) to a circuit board or crimped to a wire.

Electrical conductivity: 26% IACS \*

Melting point: 1000°C/840°C (liquidus/solidus)

### Properties of BRASS Alloy 385 ASTM B 455:

Chemical composition: Cu 60% (max), Pb 3.5% (max), Fe .35% (max), Zn remainder

Temper as machined: H02/H04

Yield Strength: 16 ksi (min)

Tensile strength: 48 ksi (min)

Hardness as machined: 80-90 Rockwell B

After machining, brass parts are often annealed (softened) for subsequent bending, swaging or crimping. A partial anneal down to 60±10 RB is recommended for 90° bends, a full anneal down to 35±15 RB is recommended for pins or terminals that are swaged (riveted) to a circuit board or crimped to a wire.

Electrical conductivity: 28% IACS \*

Melting point: 1000°C/840°C (liquidus/solidus)

### Properties of PHOSPHOR BRONZE:

Used for pins requiring more durability than brass.

Stock diameters available: 1,83/1,98mm

Chemical composition: Cu 88%, Sn 4%, Zn 4%, Pb 4%

Temper as machined: H04

Modulus of elasticity: 15 MPsi

Tensile strength: 70-80 KSI

Hardness as machined: 83 Rockwell B

Density: .321 lbs/in<sup>3</sup>

Electrical conductivity: 19% IACS \*

Melting point: 1000°C/930°C (liquidus/solidus)

### Properties of TELLURIUM COPPER:

Used for pins requiring a higher current carrying capacity than brass or phosphor bronze.

Stock diameters available: 2,01/2,36/3,18/3,96mm

Chemical composition: Cu 99.44%, Te .55%, P .008%

Temper as machined: H02

Modulus of elasticity: 17 MPsi

Tensile strength: 43 KSI

Hardness as machined: 43 Rockwell B

Density: .323 lbs/in<sup>3</sup>

Electrical conductivity: 93% IACS \*

Thermal conductivity: 91% IACS \*

Melting point: 1075°C/1051°C (liquidus/solidus)

### Properties of BERYLLIUM COPPER:

Chemical composition: Cu 98.1%, Be 1.9%

Temper as stamped: TD01

Properties after heat treatment (TH01):

Modulus of Elasticity: 19 MPsi

Tensile Strength: 175-205 KSI

Yield Strength (0.2% offset): 150-185 KSI

Elongation: 3-10%

Stress Relaxation†: 96% of stress remains after 1,000 hours @ 100 °C

70% of stress remains after 1,000 hours @ 200 °C

Hardness: 36-43 Rockwell C

Density: .298 lbs/in<sup>3</sup>

Electrical Conductivity: 22% IACS \*

Melting point: 980°C/865°C (liquidus/solidus)

Since BeCu loses its spring properties over time at high temperatures, it is rated for continuous use up to 150°C. For "down-hole" and "burn-in" applications up to 300°C. Mill-Max offers nine contacts (#19, #24, #25, #26, #27, #33, #38, #56, #58) made from Beryllium Nickel Alloy 360 (UNS N03360)

### Properties of BERYLLIUM NICKEL:

Chemical composition: Ni 97.6%, Be 1.9%, Ti 0.5%

Modulus of Elasticity: 27-30 MPsi

Tensile Strength: 245 KSI min.

Yield Strength (0.2% offset): 200 KSI min.

Elongation: 9% min.

Hardness: 49 Rockwell C

Density: .294 lbs/in<sup>3</sup>

Electrical Conductivity: 7% IACS \*

Melting point: 1,325°C/1,195°C (liquidus/solidus)

\* International Annealed Copper Standard, i.e.: as a % of pure copper.

## PROPERTIES OF PLASTICS USED BY MILL-MAX

Standard plastics used for catalog products:

### Injection Molded

**PCT** Polyester {30% glass filled}, High Temp., (black). Flammability rating UL 94 V-O

**Nylon46**, High Temp. {30% glass filled} or {45% glass filled}, (black). Flammability rating UL 94 V-O

**PPS**, High Temp. {40% glass filled}, (black). Flammability rating UL 94 V-O

### Machined

**FR-4** Epoxy/Glass Laminate. In stock thicknesses available: 0,25, 0,51, 0,79, 1,19, 1,57, 2,36, 3,18mm (natural color, beige). Other thicknesses available upon request. Flammability rating UL 94 V-O

**G-30** Polyimide/Glass Laminate, 1,57 thick (natural color, brown) Flammability rating UL 94 HB

### ALL MILL-MAX PARTS REQUIRE AN UNDERPLATE:

Brass parts need a barrier plate to prevent zinc diffusion, 1,27µm min. nickel or 2,54µm min. copper is recommended by ASTM B 545 and 579. ASTM B 488 also recommends a 1,27µm min. nickel barrier plate beneath gold to prevent copper diffusion inherent with all copper alloy products.

### MILL-MAX STANDARD UNDERPLATES:

**NICKEL** per ASTM B 689, Type 2 (Bright),

Class 1.25 (1,25µm) or Class 2.5 (2,5µm)

Also available for military and "non-magnetic" applications:

**COPPER** per ASTM B 734, Class 2.5 (2,5µm) or Class 5 (5µm)

### TEMPERATURE COMPARISON OF MOLDED INSULATORS

MATERIAL	HEAT DEFLECTION TEMP. (per ASTM D 648)
<b>PCT</b> Polyester	529°F (276°C) @ 66 psi
<b>Nylon 46</b>	554°F (290°C) @ 264 psi
<b>PPS</b>	>500°F (>260°C) @ 264 psi

Note: Materials with HDT above 446°F (230°C) are considered suitable for "eutectic" reflow soldering. For "lead-free" reflow soldering, choose materials with an HDT above 500°F (260°C).

**PCT is the standard plastic used with RoHS "lead-free" plated pins.**

### MILL-MAX STANDARD PLATINGS (FINISHES):

**GOLD** per ASTM B 488, Type 1 (99.7% min. gold),

Code C (130-200 HK {Knoop hardness}),

Class (thickness) per customer's requirements

**SILVER** per ASTM B 700, Type 1 (99.9% min. silver),

Grade B (Bright),

Class S (anti-tarnish treatment),

Thickness (7,5µm used for solder terminals)

**TIN/LEAD** (93/7) per ASTM B 545 (Appendix X6.3.2.5 to eliminate

whisker growth) Class A (2,5µm) or Class B (5µm),

Bright finish (Matte available to order)

**ELECTRO-SOLDER** (60/40) per ASTM B 579, SC2 (8µm),

Bright finish (Matte available to order)

### Standard finishes available for RoHS "lead-free" applications:

**GOLD** per ASTM B 488, Type 1 (99.7% min. gold),

Code C (130-200 HK {Knoop hardness}),

Class (thickness) per customer's requirements

**TIN** (100%) per ASTM B 545, Class A (2,5µm) or Class B (5µm),

Matte finish (With whisker and oxide inhibitors & a nickel underplate)



## Pins & Receptacles

Pin & receptacle shells are manufactured by precision high-speed turning machines. The base materials for these components are copper alloys.

Receptacles are a two piece construction consisting of a plated contact press-fit into a plated shell. The contacts are stamped from beryllium copper strip.

## Materials

### **Pins & Receptacle Shells:**

**Brass Alloy** 360 UNS C36000 ASTM-B16, and 385 UNS 38500 ASTM B455 (Up to a 6,35mm diameter)

**Phosphor Bronze** alloy 544 UNS C54400 ASTM-B139 (Up to a 1,83mm diameter)

**Tellurium Copper** alloy 145 UNS C14500 ASTM-B301 (Up to a 3,96mm diameters)

See page 154 and 203 for a complete list of standard available stock diameters.  
(For the availability of larger diameter materials contact Technical Services).

### **Contacts:**

**Beryllium copper** UNS C17200 ASTM-B194 (For most applications)

**Beryllium Nickel** UNS N03360 (For high temperature applications)

(For individual contact specifications see pages 250 - 262)  
The materials listed above are all RoHS compliant.

## Dimensional, Mechanical & Environmental Data

### **Standard tolerances for pins & receptacle shells:**

Diameters +/- 0,051mm

Lengths +/- 0,13mm

Angles +/- 2°

**Mechanical Life (Durability):** Mill-Max receptacles are capable of 1,000 minimum insertion/extraction cycles for a broad range of applications. Mating pin size, shape and finish, along with application specific variables, will affect the life of a contact.

**Contact Forces:** See individual contact specifications on pages 250 - 262.

### **Environmental Data:**

- Operating temperature range: -55/+125° C (min. / max. discontinuous)
- Vibration (No electrical discontinuity Greater than 1 µs): 10-2000 HZ, 15 G
- Shock (No electrical discontinuity Greater than 1 µs): 50 G

Electrical data is dependent on the contact used in the receptacle. See page 248 for free air current ratings of the contacts.

## Platings

GOLD per ASTM B 488 and MIL-G-45204, Type 1, Code C

SILVER per ASTM B 700, Grade B, Class S

TIN per ASTM B 545, Type 1

TIN/LEAD (93/7) per ASTM B 545

ELECTRO-SOLDER (60/40) per ASTM B 579, Bright

NICKEL per SAE-AMS-QQ-N-290

ELECTROLESS NICKEL per MIL-C-26074

COPPER per SAE-AMS-2418

## Connectors

Connectors are headers, sockets and interconnects. They consist of pins, receptacles or spring pins assembled into thermoplastics or machined laminate insulator bodies. They are available in DIP, SIP, strip, BGA and PGA packages in grids of 1mm, 1,27mm, 1,78mm, 2mm, 2,54mm, .8mm for BGA's and 2,54mm interstitial for PGA's.

## Electrical Data

	<b>SERIES:</b>	<b>100-700</b>	<b>80X</b>	<b>830</b>	<b>850</b>
• Rated current (Amps):		3	3	3	1
• Rated voltage:		100 VRMS/150 VDC			
• Contact resistance:		10 mΩ max.			
• Insulation resistance:		10,000 MΩ min.			
• Dielectric strength:		1000 VRMS min. (700 VRMS min. for series 117 Shrink DIP)			
• Air and creepage distance (mm):		0,71	0,84/0,71	0,51	0,41/0,51
		(0,30 for series 117 Shrink DIP)			
• Capacitance(pF max):		.8	1	1	1

Electrical data above does not apply to BGA, PLCC, USB or spring-loaded connectors. Electrical data for these products can be found on the following pages: BGA – Page 141; PLCC - Page 141; USB - Pages 147 - 150; Spring-Loaded connectors – Pages 6 - 19

Current ratings are for a 10° C temperature rise above ambient (20°C)

**Operating temperature range:** -55/+125° C (min./max. discontinuous)

### **General tolerances for assembled connector products:**

- Lengths: +/- 0,25mm
- Connector Flatness: 0,13mm (up to 25,4mm in length)
- Co-planarity of SMT Connectors: 0,13mm (up to 25,4mm in length)
- For connectors exceeding 25,4mm in length the flatness/ co-planarity may exceed 0,13mm. Please contact Technical Services for more information.

(Note: Specifications and tolerances are provided wherever possible. Due to the wide variety of connectors Mill-Max offers, the specific tolerances vary from product to product. If you need information regarding the tolerance of a particular part, please contact Technical Services.)

## Materials

### **Insulator Bodies:**

Standard material is glass filled thermoplastic polyester (PCT), self extinguishing, rated UL 94 V-0.

Some surface mount, pin grid array, spring pin and shrouded connector insulators are molded from high temperature Nylon 46 or PPS, rated UL 94 V-0.

FR-4 epoxy laminate is a thermoset material used in custom insulators and high temperature applications. It is especially useful because of its low Temperature Coefficient of Expansion (TCE). See chart below:

TCE for molded insulator	30 ppm/° C
TCE for 4-Layer PCB	13 ppm/° C
TCE for unclad epoxy	12 ppm/° C

The above insulator materials are all suitable for lead free soldering processes up to 260° C.

For complete material properties of plastics used by Mill-Max see page 263.

For inquiries regarding other insulator materials, please contact Technical Services.

## Spring Pins

Spring pins consist of precision-machined brass components assembled together with beryllium copper or stainless steel springs. External components and internal springs are gold-plated. Spring pins are designed to be used at mid-stroke. Over compression can cause damage restricting the movement of the plunger.

## Materials

**External Components** (Body, Piston, Base, Tail):

**Brass Alloy** 360 UNS C36000 ASTM-B16

## Springs

**Beryllium copper** UNS C17200 ASTM-B197

**Stainless Steel 302**

## Dimensional, Mechanical & Environmental Data

### **Standard tolerances for spring pins at initial height:**

Diameters +/- 0,051 mm

Lengths +/- 0,15 mm

**Mechanical life (durability):** Tested to 1,000,000 cycles

**Force tolerance:** +/- 20 g (See individual spring pin data on pages 6 - 19 for forces)

**Stroke tolerance:** +/- 0,13 mm

### **Environmental Data:**

- Operating temperature range: -55/+125° C (min. / max. discontinuous)
- Vibration (No electrical discontinuity Greater than 1 µs): 0-200 HZ, 10 G
- Shock (No electrical discontinuity Greater than 1 µs): 50 G

For complete material properties of metals, platings and plastics used by Mill-Max see page 263.

Where applicable, Mill-Max products and procedures are designed to meet the following standards:

- MIL-STD 1916** - DOD preferred methods for acceptance of product
- MIL-STD 202G** - Test methods for electronic and electrical component parts
- MIL-STD 45662** - Calibration system requirements, or ISO 10012
- MIL-F-14072** - Finishes for ground based electronic equipment
- MIL-I-45208** - Inspection system requirements or equivalent
- MIL-S-83505** - General specification for sockets (lead, electronic components)
- MIL-DTL-83734** - General specification for DIP sockets

In the interest of improved design, quality and performance, Mill-Max reserves the right to make changes in its specifications without prior notice.



# GLOSSARY OF TERMS AND DEFINITIONS

**Annealing** - Refers to a brass pin that has been softened by heat treatment which makes the pin easier to crimp, rivet (swage) or bend.

**Carrier** - An assembly consisting of an insulator with male pins onto which receptacles are loaded. This assembly is employed as a fixture during the soldering operation and is then removed leaving a PC board populated with individual receptacles. Female carriers that load male pins are also available for special applications.

**Clip** - See Contact.

**Closed Entry** - Refers to female contacts where the front rim prevents the insertion of an oversize pin that would otherwise damage the contact.

**Compliancy** - Contact's ability to accept multiple insertions and extractions of a wide range of pin shapes and sizes while retaining its original configuration.

**Compliant Press Fit** - Method of mounting an interconnect component to a PC board where a drilled and slotted receptacle or pin is pressed into a plated-through-hole without damaging the hole.

**Constant Usage Temperature (CUT)** - Constant Usage Temperature is a measure of the maximum temperature that a material may be exposed to for long periods of time, 1000 - 1500 hrs., before degradation of its electrical and mechanical properties occurs.

**Contact (and Contact Clip)** - Multi-finger spring insert of a receptacle which completes the electrical path between a male pin and a female receptacle. Also referred to as a clip.

**Contact Rating** - Current carrying capability of a contact measured in amperes with respect to temperature rise above ambient.

**Contact Resistance** - The electrical resistance at the point of connection determined by the contact geometry, area of contact, plating and normal force.

**Coplanarity** - Refers to the measurement of multiple points and their distance from a respective plane. This is particularly useful for surface mount parts to determine the maximum amount of difference in the height of the surfaces that need to be soldered.

**Electroplating** - The electrodepositing of a metal coating on a conductive object such as a pin, shell, or contact clip.

**Electro-vibratory Plating** - An electroplating system where the parts are processed in a vibrating basket which ensures uniform plating thickness and avoids damage to delicate parts.

**End Stackable** - The ability for connectors to be mounted end to end while maintaining grid or spacing.

**Extraction Force (or Withdrawal Force)** - The force required to remove a lead from a contact.

**Epoxy** - Woven glass cloth epoxy laminate. Classified as a thermoset, the woven fibers of these materials enable them to withstand high temperatures without being damaged. Cut from large sheets of material, the insulator is then machined on a high speed drill/router the same way as printed circuit boards are fabricated.

**Electrostatic Discharge (ESD)** - The momentary electric current that flows between two objects that may cause damage to electronic equipment.

**Flash (Plating)** - A very thin plating of metal, usually less than 0,25 micro meters, to uniformly cover the surface of the base metal.

**Flatness** - Sometimes used in place of coplanarity, flatness refers to the amount of variation of a plane or surface.

**Floating Contact** - In surface mount sockets, a receptacle designed to move up and down freely in an insulator to compensate for unevenly dispensed solder paste.

**Free Machining Alloy** - An alloy which is easy to machine, e.g. brass alloy 360.

**Fretting** - A form of corrosion caused by vibration.

**Gas Tight Connection** - An electrical connection of sufficient pressure to prevent the intrusion of a corrosive atmosphere into the contact area.

**Heat Deflection Temperature (HDT)** - An industry recognized test for comparing the short term effects of high temperature on plastics.

**Heat Treating** - The process of using specific heating and cooling cycles to alter the mechanical properties of an alloy. Generally, heat treating can harden or soften a metal depending on the material, the parameters used and the desired physical property.

**Hex Press Fit** - A method of press-fitting either a pin or receptacle, using a hexagonal cross section, into a plated through-hole without causing damage to the hole while still maintaining a gas tight seal.

**High Speed Turning** - See Precision-Machined.

**Injection Molding** - A method of molding plastics by first heating granular plastic to its molten state and injecting it into the mold cavity where the plastic solidifies and is then ejected from the cavity.

# GLOSSARY OF TERMS AND DEFINITIONS

**Insertion Force** - The force required to insert a male lead into a female socket.

**Knurl** - A vertical serration machined around the diameter of an interconnect pin providing a retention feature for press-fitting in a PC board or insulator and also preventing rotation of the pin.

**LCP (Liquid Crystal Polymer)** - Classified as a thermoplastic, LCP is a hard, rigid material which exhibits outstanding strength at high temperatures and exceptional strength and toughness in its thin walls. Applications: LCP is used as an insulator material for tight grid (1,27, 2mm) connectors and extremely high temperature requirements.

**Mating Pin** - The pin used to interconnect two electronic devices by inserting it into the contact. Critical features are diameter, length, and shape (but not limited to.)

**Machined** - See Precision-Machined.

**Migration** - For a brass part plated with tin or gold, the migration of zinc from brass to the surface of the plating. This becomes zinc oxide and renders the part unsolderable. Zinc migration is prevented by using a copper or nickel underplate as a barrier.

**Nylon 46** - Classified as thermoplastics. Nylon 46 offers superior heat resistance, good electrical properties and excellent toughness in its thin walls, which are desirable characteristics for connector insulators. Its superior strength in thin walls enables the press-fitting of pins in close proximity to each other without cracking or warping the material, making it ideal for molding 2mm and 1,27mm grid insulators. Nylon 46 is suitable for high temperature applications including vapor phase, infra-red reflow and wave soldering operations.

**Passive Device or Component** - An electronic connector that consumes electrical energy, but does not produce electrical energy. Passive devices are not susceptible to significant ESD damage.

**PCB** - Printed Circuit Board.

**PCT (Polycyclohexane Terephthalate)** - Thermoplastic polyester is rated for higher temperatures. PCT is a standard material on DIP and SIP insulators for higher temperature operations. All PGA and surface mount products are molded from PCT and are suitable for infra-red, vapor phase and wave soldering.

**Plating** - A process in which metals (e.g. gold, tin-lead, nickel, silver) are electrically deposited onto a base metal in very thin and precise thicknesses.

**Plated Through-Hole** - A hole in a printed circuit board which has metallic walls connected to conductors on the surface or inside the board, in which the component lead is inserted and soldered.

**Precision-Machined** - Manufacturing process whereby a rapidly turning solid metal rod is cut to precise tolerances.

**Receptacle** - Female contact consisting of an outer shell & inner spring contact (clip) designed for multiple mating/unmating cycles with a male pin or component lead.

**Screw-Machined** - See Precision-Machined.

**Secondary Machining** - A process in which holes, slots, flats, squares or other special features may be machined onto a pin or receptacle after the basic shape of the part has been turned on a high speed lathe.

**Shrink DIP Package** - An IC which has a pin spacing of 1,78mm on centers.

**Skiving** - The removal of a thin amount of plating when pins or contacts are press fit. For example, soft platings may yield some amount of skiving upon press fitting into an insulator or board. Skiving may also appear under a contact clip pressed into a receptacle shell.

**Standoff** - A protrusion at the bottom of the connector used to raise it off the PC board to aid in solder fillet formation, board inspection, flux removal and cleaning.

**Swage Mount** - A type of mounting commonly used with solder terminals and printed circuit pins where one end of the terminal is flared out (riveted) securing it to the PCB.

**Thermal Coefficient of Expansion (TCE)** - Expansion of material caused by an increase in temperature.

**Thermoset** - Type of plastic which is heat cured into a permanent shape and, due to chemical reaction, cannot be remelted.

**Thermoplastics** - Type of plastic which is molded under heat and pressure and can be remelted & reused many times.

**Top Plate** - Final surface plating over base metal and underplating.

**Underplate** - Plating between the base metal and the top plating.

**Withdrawal Force (or Extraction Force)** - The force required to remove a lead from a contact.

**Wrapost (Terminal or Receptacle)** - The length of square cross section of certain pins and receptacles which is used for making electrical connections via wire wrapping. Wire wrapping is a process in which wire is wrapped around the post to form a gas-tight connection without soldering.

# INDEX

## NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

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104-XX-XXX-41-780000	0478	96	162-XX-XXX-00-180000	6218	127
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151-10-XXX-00-003000	5503	120	319-10-1XX-00-002000	1940	20
151-10-XXX-00-004000	5504	120	319-10-1XX-00-005000	1938	20
151-10-XXX-00-005000	5505	120	319-10-1XX-00-006000	1948	20.2
151-10-XXX-00-009000	5509	121	319-10-1XX-30-007000	1957	20.2
151-10-XXX-00-010000	5510	121	319-10-1XX-30-008000	1953	20.1
151-10-XXX-00-011000	5511	121	319-10-1XX-30-041000	1941	20.1
153-XX-XXX-00-001000	5301	116	319-10-1XX-30-054000	1954	20.1



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## NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #	MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
319-10-1XX-30-055000	1955	20.2	395-XX-101-03-380000	8433	151
319-10-1XX-40-080001	1980	22.4	395-XX-101-07-350000	8994	151
321-13-1XX-41-001000	0040-1	69	395-XX-101-34-340000	8993	151
322-XX-1XX-41-001000	0089-2	69	399-XX-1XX-10-003000	1103	46
323-XX-1XX-41-001000	0088-3	69	399-10-1XX-10-007000	1960	20.2
324-XX-1XX-41-002000	0086-4	69	399-10-1XX-10-008000	1940	20.1
326-XX-1XX-41-001000	2601	71	399-XX-1XX-10-009000	5011	46
326-XX-1XX-41-002000	2602	71	399-XX-0XX-21-300000	9930	41
326-XX-1XX-41-003000	2603	71	399-XX-0XX-00-310000	9931	41
327-XX-121-41-002000	1702-2	125	406-XX-2XX-30-068000	0668	49
327-XX-121-41-003000	1703-3	125	406-XX-2XX-30-068001	0668	49
328-XX-1XX-40-020001	2820	87.4	410-XX-2XX-10-001000	1001	134
329-XX-1XX-41-540000	2954	48	410-XX-2XX-10-002000	1001	134
329-10-1XX-00-560000	2956-1	49	410-XX-2XX-41-001000	1001	47,66
330-10-1XX-00-240000	3024	20	410-XX-2XX-41-105000	1005	51
330-10-001-00-770800	3077	87.1	411-XX-2XX-41-001000	0134	66
334-XX-1XX-00-000000	3400	81	411-XX-2XX-41-003000	1103	66.1
334-XX-1XX-00-010000	3401	81	414-XX-2XX-41-117000	1434	49
334-XX-1XX-00-020000	3402	81	415-XX-2XX-41-001000	0501	66
334-XX-1XX-00-050000	3405	81	415-XX-2XX-41-003000	1534	66
334-XX-1XX-00-100000	3410	81	415-XX-2XX-41-004000	0512	45.2
335-XX-1XX-00-160000	3516	78	416-XX-2XX-41-001000	0153-5	68
339-XX-1XX-40-000000	3900	50.1	416-XX-2XX-41-003000	0153-2	68
340-XX-1XX-30-780100	4078	41,49	416-XX-2XX-41-006000	0153-1	68
342-XX-1XX-00-591000	4259-1	82	416-XX-2XX-41-007000	0153-3	68
342-XX-1XX-00-592000	4259-2	82	416-XX-2XX-41-008000	0153-4	68
342-XX-1XX-00-593000	4259-3	82	419-10-2XX-00-001000	1942	21
342-XX-1XX-00-594000	4259-4	82	419-10-2XX-00-002000	1940	21
346-XX-1XX-41-012000	4612	73	419-10-2XX-00-005000	1938	21
346-XX-1XX-41-013000	4613	73	419-10-2XX-00-006000	1948	21.2
349-10-1XX-00-560000	4956-1	59	419-10-2XX-30-007000	1947	21.2
350-XX-1XX-00-001000	0290	52,84	419-10-2XX-30-041000	1941	21.1
350-XX-1XX-00-006000	3404	46	419-10-2XX-30-042000	1941/1942	21.1
350-XX-1XX-00-106000	3404	51	419-10-2XX-30-054000	1954	21.1
350-XX-1XX-00-107000	3404	51	419-10-2XX-30-055000	1955	21.2
351-10-1XX-00-003000	5503	79	421-XX-2XX-41-001000	0040-1	70
351-10-1XX-00-004000	5504	79	422-XX-2XX-41-001000	0089-2	70
351-10-1XX-00-005000	5505	79	423-XX-2XX-41-001000	0088-3	70
351-10-1XX-00-009000	5509	79	424-XX-2XX-41-002000	0086-4	70
351-10-1XX-00-010000	5510	79	426-XX-2XX-41-001000	2601	72
351-10-1XX-00-011000	5511	79	426-XX-2XX-41-002000	2602	72
351-10-1XX-40-002000	5102	50	426-XX-2XX-41-003000	2603	72
353-XX-1XX-00-001000	5301	86	429-XX-2XX-41-540000	2954	48
360-XX-1XX-00-001000	0282	84	429-10-2XX-00-560000	2956-0	49
362-XX-1XX-00-001000	1106-2	86	430-10-2XX-00-240000	3024	21
363-XX-1XX-00-001000	1106-3	86	435-XX-2XX-00-160000	3516	78
364-10-1XX-00-580000	6458	78	442-XX-2XX-00-591000	4259-1	83
370-XX-1XX-00-001000	0700	84	442-XX-2XX-00-592000	4259-2	83
370-10-001-00-070800	7007	87.1	442-XX-2XX-00-593000	4259-3	83
373-XX-1XX-00-001000	0730-3	86	442-XX-2XX-00-594000	4259-4	83
380-XX-1XX-00-001000	8000	48,84	446-XX-2XX-41-012000	4612	74
380-10-0XX-00-002000	3080	47.1	446-XX-2XX-41-013000	4613	74
380-10-001-00-000800	8000	87.1	449-10-2XX-00-560000	4956-1	59
380-XX-1XX-10-003000	3180	47.2	450-XX-2XX-00-001000	0290	52,85
382-XX-1XX-00-001000	8301-2	86	450-XX-2XX-00-006000	3404	47
383-XX-1XX-00-001000	8301-3	86	450-XX-2XX-00-106000	3404	51
388-XX-102-11-740799	8874	152	451-10-2XX-00-003000	5503	80
388-XX-102-11-740800	8874	152	451-10-2XX-00-004000	5504	80



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## NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #	MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
451-10-2XX-00-005000	5505	80	714-XX-XXX-31-012000	0552-1	77
451-10-2XX-00-009000	5509	80	714-XX-XXX-31-018000	0552-2	77
451-10-2XX-00-010000	5510	80	714-XX-XXX-41-001000	1401	76
451-10-2XX-00-011000	5511	80	800-XX-0XX-10-001000	7007	54
453-10-2XX-00-001000	5301	87	800-XX-0XX-10-002000	5016	53
460-XX-2XX-00-001000	0282	85	800-XX-0XX-10-004000	3077	62
463-XX-2XX-00-001000	1106-3	87	800-XX-0XX-10-007000	1107	61
464-10-2XX-00-580000	6458	78	800-10-0XX-10-052000	5016	58
470-XX-2XX-00-001000	0700	85	800-XX-0XX-20-001000	5005	54
473-XX-2XX-00-001000	0730-3	87	800-10-0XX-20-201000	5005	64
480-10-2XX-00-001000	8000	48,85	800-10-0XX-30-001000	7007	59
480-10-0XX-00-002000	3080	47.1	800-10-0XX-30-052000	5016	58
483-XX-2XX-00-001000	8301-3	87	800-10-0XX-40-002000	1502	59.1
499-XX-2XX-10-003000	1103/1602	47	800-XX-0XX-61-001000	5601	56
499-10-2XX-10-007000	1958/1960	21.2	800-10-0XX-61-051000	5607	58
499-10-2XX-10-008000	1938/1940	21.1	800-XX-0XX-62-001000	5602	56
499-10-2XX-10-009000	5011/5113	47	801-XX-0XX-10-001000	1304	54
507-10-XXX-XX-XXX437	0737	140	801-XX-0XX-10-002000	1303	53
510-XX-XXX-XX-XXX00X	1001	138	801-XX-0XX-10-003000	1303	52
511-XX-XXX-XX-XXX00X	0134	138	801-XX-0XX-10-004000	1313	62
513-XX-XXX-XX-XXX085	1385	138	801-13-0XX-10-007000	1134	61
514-XX-XXX-XX-XXX034	1434	138	801-XX-0XX-10-012000	1303	53
515-XX-XXX-XX-XXX00X	0501	138	801-XX-0XX-10-013000	1303	52
518-XX-XXX-XX-XXX00X	180X	138	801-43-0XX-10-201000	1304	64
522-XX-XXX-XX-XXX00X	0089-2	138	801-43-0XX-10-212000	1303	64
523-XX-XXX-XX-XXX00X	0088-3	138	801-XX-0XX-20-001000	1305	54
540-10-XXX-XX-XXX448	4048	142	801-43-0XX-20-201000	1305	64
540-10-XXX-XX-XXX454	4054	142	801-43-0XX-30-001000	1304	59
540-10-XXX-XX-XXX498	4098	142	801-XX-0XX-40-002000	1303	59.1
540-44-XXX-17-40000X	N/A	145	801-XX-0XX-61-001000	4614	56
550-XX-XXX-XX-XXX012	5012	140	801-XX-0XX-62-001000	4615	56
551-XX-XXX-XX-XXX003	5503	140	802-XX-0XX-10-001000	7007	55
551-XX-XXX-XX-XXX004	5504	140	802-XX-0XX-10-002000	5016	53
551-XX-XXX-XX-XXX005	5505	140	802-XX-XXX-10-004000	3077	62
579-10-XXX-XX-XXX429	7929	142	802-XX-0XX-10-007000	1107	61
582-11-XXX-XX-XXX414	8214	142	802-10-0XX-10-052000	5016	58
587-10-XXX-XX-XXX437	8737	142	802-XX-0XX-20-001000	5005/5107	55
594-XX-020-01-007032	8857-X	133	802-10-0XX-30-001000	7007	59
599-11-XXX-XX-XXX428	9928	142	802-10-0XX-30-052000	5016	58
599-10-XXX-XX-XXX429	9929	142	802-XX-0XX-61-001000	5601	57
599-11-XXX-XX-XXX453	9953	142	802-10-0XX-61-051000	5607	58
599-XX-XXX-XX-XXX476	9976	140	802-XX-0XX-62-001000	5602	57
605-XX-XXX-11-480000	0548	114	803-XX-XXX-10-001000	1304	55
605-XX-XXX-XX-XXX048	0548	139	803-XX-0XX-10-002000	1303	53
612-XX-XXX-41-001000	0255	112	803-XX-0XX-10-003000	1303	52
612-XX-XXX-41-002000	8855	112	803-XX-XXX-10-004000	1313	62
612-XX-XXX-41-003000	0135	112	803-13-0XX-10-007000	1134	61
612-XX-XXX-41-004000	0132	112	803-XX-XXX-20-001000	1305/1306	55
614-XX-XXX-31-002000	0442	115	803-XX-XXX-30-001000	1304	59
614-XX-XXX-31-007000	1407	114	803-XX-XXX-61-001000	4614	57
614-XX-XXX-31-012000	0552-1	115	803-XX-XXX-62-001000	4615	57
614-XX-XXX-31-018000	0552-2	115	804-10-0XX-10-002000	5016	60
614-XX-XXX-41-001000	1401	113	805-43-0XX-10-012000	1303	60
614-XX-XXX-XX-XXX007	1407	139	807-22-001-10-00X101	0906-X	19.5
614-XX-XXX-XX-XXX012	0552-1	139	807-22-001-10-00X191	0906-X	19.5
614-XX-XXX-XX-XXX0XX	1401	139	807-22-001-10-02X101	0914-X	19.6
712-XX-XXX-41-001000	0255	75	807-22-001-30-00X101	0900-X	19.3
714-XX-XXX-31-007000	1407	76	807-22-001-30-00X191	0900-X	19.3



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807-22-001-30-01X101	0907-X	19.4	832-10-0XX-20-052000	3160/3161	45.1
807-22-001-30-01X191	0907-X	19.4	832-XX-XXX-30-001000	6218	44
808-10-040-10-151000	3501/3502/3503	58.2	832-10-0XX-30-003000	1949	22.2
809-43-040-10-001000	0405/8852/9324	58.2	832-10-0XX-30-003191	1949	22.2
810-22-0XX-40-001101	0916-0	10	832-10-0XX-30-004000	1950	22.2
810-22-0XX-40-005191	7966-0	10.1	832-10-0XX-30-004191	1950	22.2
811-22-0XX-30-00X101	0900-X	07	832-10-0XX-30-052000	3143	45.1
811-22-00X-30-00X191	0900-X	12	833-XX-XXX-10-001000	1802	43
812-22-0XX-30-00X101	0907-X	08	833-10-XXX-10-002000	1802	45.1
812-22-0XX-30-01X101	0907-X/0908-X	11	833-43-XXX-20-001000	1805/3805	45
812-22-00X-30-00X191	0907-X	12	833-XX-XXX-30-001000	1802	44
813-22-0XX-30-00X101	0900-X	07	834-XX-0XX-10-001000	3435	63
813-22-0XX-30-00X191	0900-X	12	835-XX-0XX-10-001000	3435	63
814-22-0XX-30-00X101	0907-X	08	835-XX-0XX-40-030001	3530	87.3
814-22-0XX-30-01X101	0907-X/0908-X	11	836-22-0XX-10-001101	7911-0	19.7
814-22-0XX-30-00X191	0907-X	12	836-22-0XX-30-001101	0911-0	19.2
815-22-0XX-30-001101	0965	06	836-22-0XX-30-001191	0911-0	19.2
815-22-0XX-30-001191	0965	06	837-22-0XX-30-001101	0919-0	9.1
816-22-0XX-10-00X101	0908-X	15	837-22-0XX-30-001191	0919-0	9.1
817-22-0XX-30-001101	0965	06	838-22-XXX-10-001101	7911-0	19.7
817-22-0XX-30-001191	0965	06	838-22-0XX-30-001101	0911-0	19.2
818-22-0XX-10-00X101	0908-X	15	838-22-0XX-30-001191	0911-0	19.2
819-22-0XX-30-001101	0913-0	09	839-22-XXX-30-001101	0919-0	9.1
819-22-0XX-30-001191	0913-0	12.1	839-22-XXX-30-001191	0919-0	9.1
820-22-0XX-30-001101	0913-0	09	850-XX-0XX-10-001000	4006-0	34
820-22-0XX-30-001191	0913-0	12.1	850-XX-0XX-10-003000	3050	35.1
821-22-0XX-10-00X101	0906-X	13	850-XX-0XX-20-001000	4006-1	36
823-22-0XX-10-00X101	0906-X	13	850-XX-0XX-20-003000	3050	35.1
824-22-0XX-00-001000	0933	17	850-XX-0XX-30-001000	4006-0	37
824-22-0XX-00-005000	0947	17.1	850-XX-0XX-30-002000	4006-0	37
825-22-0XX-10-00X101	0914	14	850-10-0XX-40-001000	4006-1	40
826-22-0XX-00-001000	0933	17	851-XX-0XX-10-001000	4890-0	34
826-22-0XX-00-005000	0947	17.1	851-XX-0XX-10-002000	0467	34
827-22-0XX-10-00X101	0914	14	851-XX-0XX-10-003000	1157	35.1
829-22-0XX-20-00X101	0929, 0970	16	851-XX-0XX-10-011000	4890-1	35
830-XX-0XX-10-001000	5012	43	851-XX-0XX-10-021000	4890-2	35
830-10-0XX-10-003000	1951	22.1	851-XX-0XX-20-001000	4890-1	36
830-10-0XX-10-004000	1952	22.1	851-XX-0XX-30-001000	4890-0	37
830-10-0XX-10-005000	3078-0	44.1	851-XX-0XX-30-002000	4890-0	37
830-XX-0XX-20-001000	3790	45	851-XX-0XX-40-001000	4890-1	40
830-10-0XX-20-005000	3078-1	44.1	852-XX-XXX-10-001000	4006-0	34
830-XX-0XX-30-001000	6218	44	852-XX-0XX-10-003000	3050	35.2
830-XX-0XX-30-002000	6218	44	852-XX-XXX-20-001000	4006-1/2	36
830-10-0XX-30-003000	1949	22.1	852-XX-XXX-30-001000	4006-0	37
830-10-0XX-30-003191	1949	22.1	853-XX-XXX-10-001000	4890-0	34
830-10-0XX-30-004000	1950	22.1	853-XX-0XX-10-003000	1157	35.2
830-10-0XX-30-004191	1950	22.1	853-XX-XXX-10-011000	4890-1	35
830-XX-0XX-40-028000	3028	59.1	853-XX-XXX-10-021000	4890-2	35
831-XX-0XX-10-001000	1802	43	853-XX-XXX-20-001000	4890-1/2	36
831-XX-0XX-20-001000	1805	45	853-XX-XXX-30-001000	4890-0	37
831-XX-0XX-30-001000	1802	44	854-22-0XX-10-001101	0950-0	18
831-XX-0XX-30-002000	1802	44	854-22-0XX-20-001101	0985-0	18.1
832-XX-XXX-10-001000	5012	43	854-22-0XX-20-601101	0985-0	18.1
832-10-0XX-10-003000	1951	22.2	854-22-0XX-30-001101	0951-0	19
832-10-0XX-10-004000	1952	22.2	854-22-0XX-40-001101	0985-0	18.2
832-10-0XX-10-005000	3078-0	44.1	854-22-0XX-40-601101	0985-0	18.2
832-10-0XX-10-052000	3143	45.1	855-22-0XX-10-001101	0950-0	18
832-XX-XXX-20-001000	3790/3796	45	855-22-0XX-30-001101	0951-0	19



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855-22-0XX-30-002191	0951-0	19.1	917-XX-XXX-41-005000	1705	136
856-10-0XX-10-002000	1934	21.4	940-44-XXX-17-40000X	N/A	143
856-10-0XX-10-051000	1933	22	940-44-XXX-24-000000	N/A	144
856-10-0XX-20-001000	1931	21.3	999-11-XXX-10-000000	N/A	152
856-10-0XX-20-002000	1831	21.3			
856-10-0XX-30-002000	1936	21.4			
856-10-0XX-30-051000	1935	22			
856-10-0XX-40-001000	1931	21.3			
856-10-0XX-40-002000	1831	21.3			
857-10-0XX-10-002000	1934	21.4			
857-10-0XX-10-051000	1933	22			
857-10-0XX-30-002000	1936	21.4			
857-10-0XX-30-051000	1935	22			
858-10-0XX-10-001000	1969	19.76			
858-10-0XX-10-002000	1969-1	19.77			
858-10-0XX-10-011000	1969	19.76			
858-10-0XX-10-012000	1969-1	19.77			
858-10-0XX-30-001000	1959	19.76			
858-10-0XX-30-002000	1959-1	19.77			
858-10-0XX-30-011000	1959	19.76			
858-10-0XX-30-012000	1959-1	19.77			
858-10-0XX-30-601000	1959	19.76			
858-10-0XX-30-602000	1959-1	19.77			
858-10-0XX-30-611000	1959	19.76			
858-10-0XX-30-612000	1959-1	19.77			
860-10-0XX-10-002000	3039	33			
860-10-0XX-30-002000	3039	33.1			
861-13-0XX-10-002000	0439	33			
861-13-0XX-30-002000	0439	33.1			
862-XX-121-00-180000	6218	127			
862-10-121-30-180000	6218	128			
868-10-0XX-00-001000	1968	19.78			
868-10-0XX-00-002000	1968-1	19.79			
868-10-0XX-00-011000	1968	19.78			
868-10-0XX-00-012000	1968-1	19.79			
868-22-0XX-00-001101	0868	19.78			
868-22-0XX-00-011101	0868	19.78			
870-10-0XX-20-001000	3790	42			
871-XX-0XX-20-001000	1805	42			
888-30-005-20-002000	5065/5066	58.1			
888-93-005-00-001000	5070/5084	58.1			
891-10-064-30-120000	N/A	32			
893-43-064-30-420000	N/A	32			
896-43-004-00-000000	N/A	148			
896-43-004-90-000000	N/A	148			
896-43-005-40-100001	N/A	150			
896-43-008-90-000000	N/A	148			
896-46-009-90-300000	N/A	147			
897-43-004-90-000000	N/A	148			
897-43-005-00-100001	N/A	150			
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