

643412-1 ✓ ACTIVE

MATE-N-LOK | Universal MATE-N-LOK

TE Internal #: 643412-1

PCB Mount Header, Vertical, Wire-to-Board, 2 Position, 6.35 mm [.25 in] Centerline, Fully Shrouded, Pre-Tin, Universal MATE-N-LOK

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

Connector System: **Wire-to-Board**

Number of Positions: **2**

Centerline (Pitch): **6.35 mm [.25 in]**

## Features

### Product Type Features

Mixed & Hybrid Header	No
Connector Shape	Rectangular
PCB Connector Type	PCB Mount Header
Connector System	Wire-to-Board
Header Type	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

### Configuration Features

Number of Columns	2
Number of Loaded Positions	2
Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	2
Number of Rows	1



Number of Power Positions	2
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### Electrical Characteristics

Operating Voltage	600 VAC
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### Body Features

Primary Product Color	White
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### Contact Features

Contact Underplating Material	Nickel
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Contact Underplating Material Thickness	1.27 – 1.79 $\mu\text{m}$ [50 – 70 $\mu\text{in}$ ]
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Contact Size	2.95mm
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PCB Contact Termination Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]
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Contact Shape & Form	Round
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Contact Layout	Inline
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Contact Base Material	Phosphor Bronze
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Contact Mating Area Plating Material	Pre-Tin
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Contact Mating Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]
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Contact Type	Socket
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Contact Current Rating (Max)	12 A
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PCB Contact Termination Area Plating Material	Pre-Tin
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### Termination Features

Termination Post & Tail Diameter	1.57 mm[.062 in]
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Termination Post & Tail Length	3.56 mm[.14 in]
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Termination Method to PCB	Through Hole - Solder
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### Mechanical Attachment

Panel Mount Feature	Without
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Mating Retention Type	Locking Tab
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Mating Alignment Type	Polarization
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PCB Mount Alignment Type	Standard Polarized Tail
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PCB Mount Alignment	With
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Mating Retention	With
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PCB Mount Retention	Without
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Connector Mounting Type	Board Mount
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Mating Alignment	With
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### Housing Features

Mating Entry Location	Top
Centerline (Pitch)	6.35 mm [.25 in]
Housing Material	Nylon

### Dimensions

Connector Width	7.62 mm [.3 in]
PCB Thickness (Recommended)	1.57 mm [.062 in]
Connector Height	13.97 mm [.55 in]
Connector Length	13.97 mm [.55 in]
Profile Height from PCB	14.73 mm [.58 in]

### Usage Conditions

Operating Temperature (Max)	105 °C [221 °F]
Operating Temperature Range	-40 – 105 °C [-40 – 221 °F]

### Operation/Application

Circuit Application	Power
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### Industry Standards

Compatible With Agency/Standards Products	CSA, UL, VDE
UL Rating	Recognized
Compatible With Approved Standards Products	UL E28476
Glow Wire Rating	Standard Part - Not Glow Wire
UL Flammability Rating	UL 94V-0

### Packaging Features

Packaging Quantity	200
Packaging Method	Bag

### Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2025 (250)



Candidate List Declared Against: JUNE 2025 (250)  
Does not contain REACH SVHC

Halogen Content

Low Halogen - Br, Cl, F < 900 ppm per homogenous material. Also BFR/CFR/PVC Free

Solder Process Capability

Wave solder capable to 265°C

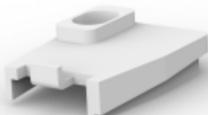
Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

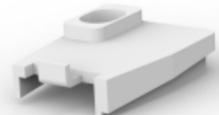
## Compatible Parts



TE Part # 1703062-1  
CAP, 2 CIRCUIT , UNIVERSAL MATE-N-LOK



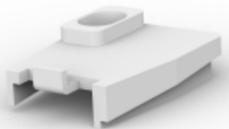
TE Part # 1-640719-0  
02P UMNL STR/REL & INSRT NATL



TE Part # 1-640719-1  
02P UMNL STR/REL NATL



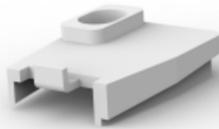
TE Part # 2-480699-0  
02P UMNL CAP HSG NATL



TE Part # 640713-1  
02P UMNL STR/REL & INSERT



TE Part # 794991-1  
02P UMNL BLACK INTERFACE SEAL

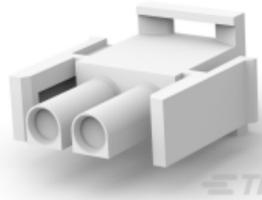


TE Part # 640713-2  
02P UMNL STR/RELIEVE

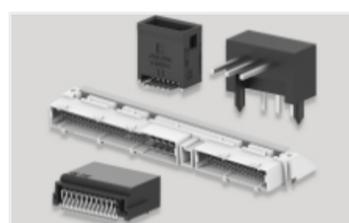
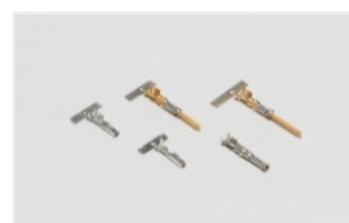


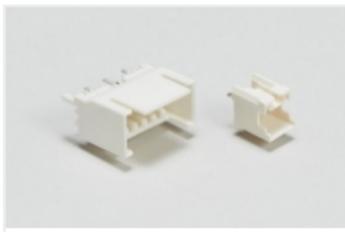
TE Part # 1969799-1  
02P UMNL PIN HDR ASSY POL, PIN V0 GW



 <p>TE Part # 1-350589-0 STR/REL CLAMP NATL</p>	 <p>TE Part # 770017-1 02P UMNLII IN-LNE PLUG HSG KIT</p>	 <p>TE Part # 643406-3 05P UMNL PIN HDR ASS BLK 94VO</p>	 <p>TE Part # 2178649-1 2P UMNL CAP HSG, GW</p>
 <p>TE Part # 2178649-3 2P UMNL CAP HSG, GW</p>	 <p>TE Part # 1703062-2 CAP, 2 CIRCUIT, UNIVERSAL MATE-N-LOK</p>	 <p>TE Part # 794270-1 02P UMNL WIRE SEAL</p>	 <p>TE Part # 1703062-3 CAP, 2 CIRCUIT, UNIVERSAL MATE-N-LOK</p>
 <p>TE Part # 794269-1 02P UMNL INTERFACE SEAL</p>	 <p>TE Part # 350811-1 STR/REL CLAMP</p>	 <p>TE Part # 350777-1 02P UMNL PLUG HSG</p>	 <p>TE Part # 1586856-1 02P UMNL CAP HSG, GW</p>

Also in the Series | **Universal MATE-N-LOK**

 <p>Circular Power Connectors(2)</p>	 <p>Connector Caps &amp; Covers(34)</p>	 <p>Connector Seals &amp; Cavity Plugs(27)</p>	 <p>Connector Strain Relief(7)</p>
 <p>Insertion &amp; Extraction Tools(4)</p>	 <p>PCB Headers &amp; Receptacles(285)</p>	 <p>Power Contacts(206)</p>	 <p>Rectangular Power Connectors(642)</p>



Wire-to-Board Headers & Receptacles  
(285)

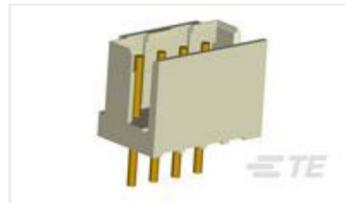
## Customers Also Bought



TE Part #130046  
PIDG RING TONGUE



TE Part #151730  
22-16 PIDG R/T 2BA NYLON EXP.1



TE Part #292165-4  
CT P/HDR BOX V 4P T/P NAT



TE Part #2-324955-1  
TERMINAL,SOLIS R 16-14 8



TE Part #1-641964-1  
02P UMNL HDR ASSY POL BLK



TE Part #641968-1  
04P UMNL PIN HDR ASSY POL 94VO



TE Part #641968-3  
04P UMNL PIN HDR ASSY POL 94VO



TE Part #643415-1  
04P UMNL HDR ASSY POL



TE Part #3-644615-2  
02P MTA156 POL HDR ASSY LF



TE Part #826634-5  
05P MODU 2 PIN HDR.

## Documents

### Product Drawings

[02P UMNL HDR ASSY POL 94VO](#)

English

### CAD Files

[Customer View Model](#)

[ENG\\_CVM\\_643412-1\\_L.3d\\_igs.zip](#)

English

[Customer View Model](#)



[ENG\\_CVM\\_643412-1\\_L.3d\\_stp.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_643412-1\\_L.2d\\_dxf.zip](#)

English

**3D PDF**

English

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### Datasheets & Catalog Pages

[SOFT\\_SHELL\\_PIN\\_SOCKET\\_CONNECTORS\\_STANDARD\\_DENSITY](#)

English

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### Product Specifications

[Application Specification](#)

English

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### Instruction Sheets

[Instruction Sheet \(U.S.\)](#)

English

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### Agency Approvals

[UL](#)

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