

5120521-1 ✓ ACTIVE



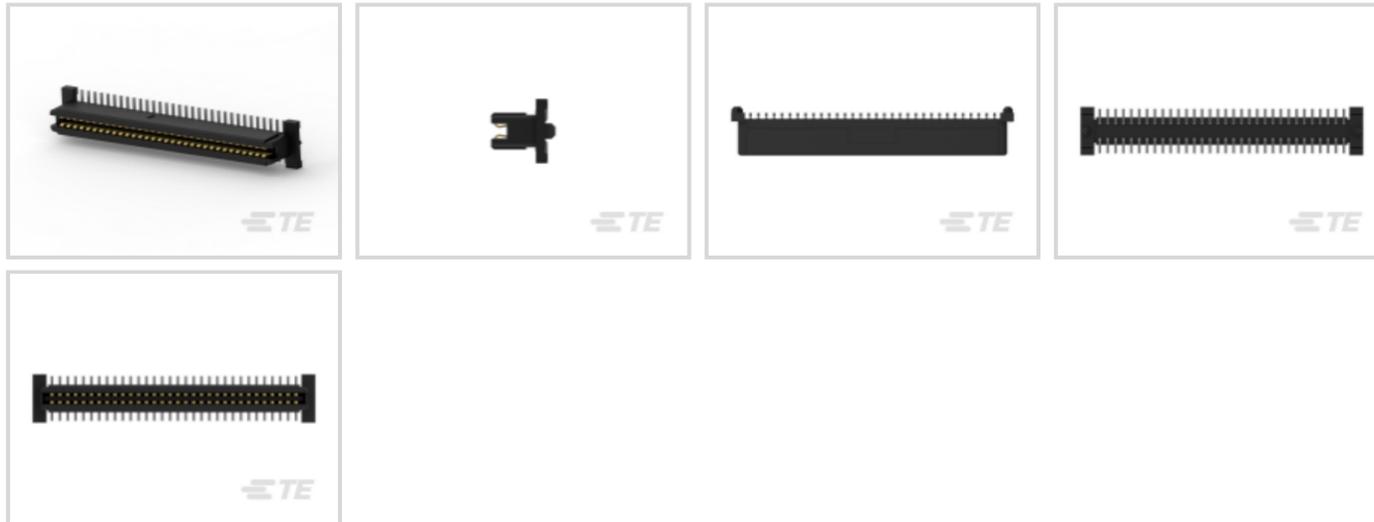
### Free Height

TE Internal #: 5120521-1

PCB Mount Receptacle, Vertical, Board-to-Board, 64 Position, 1 mm [.039 in] Centerline, Gold (Au), Surface Mount, Signal, Black, Free Height

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm



PCB Connector Type: **PCB Mount Receptacle**

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

Number of Positions: **64**

Centerline (Pitch): **1 mm [.039 in]**

PCB Mount Orientation: **Vertical**

[All Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm \(57\)](#)

## Features

### Product Type Features

PCB Connector Type	PCB Mount Receptacle
Connector System	Board-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

### Configuration Features

Number of Columns	32
Stackable	Yes
Number of Positions	64
PCB Mount Orientation	Vertical
Board-to-Board Configuration	Parallel

### Electrical Characteristics



Operating Voltage	250 VAC
-------------------	---------

Insulation Resistance	2 MΩ
-----------------------	------

### Signal Characteristics

Differential Signaling	Yes
------------------------	-----

### Body Features

Primary Product Color	Black
-----------------------	-------

### Contact Features

Contact Underplating Material Thickness	1.27 μm[50 μin]
---	-----------------

PCB Contact Termination Area Plating Material Finish	Matte
--	-------

Mating Tab Width	.63 mm[.024 in]
------------------	-----------------

PCB Contact Termination Area Plating Material Thickness	3.81 μm[150 μin]
---	------------------

Contact Shape & Form	Single Beam, Square
----------------------	---------------------

Contact Layout	Inline
----------------	--------

Contact Base Material	Phosphor Bronze
-----------------------	-----------------

Mating Tab Thickness	.2 mm[.008 in]
----------------------	----------------

PCB Contact Termination Area Plating Material	Tin
---	-----

Contact Mating Area Plating Material Thickness	.76 μm[30 μin]
--	----------------

Contact Mating Area Plating Material	Gold (Au)
--------------------------------------	-----------

Contact Type	Socket
--------------	--------

Contact Current Rating (Max)	1 A
------------------------------	-----

### Termination Features

Rectangular Termination Post & Tail Width	.3 mm[.012 in]
---	----------------

Rectangular Termination Post & Tail Thickness	.2 mm[.008 in]
---	----------------

Termination Method to PCB	Surface Mount
---------------------------	---------------

### Mechanical Attachment

Mating Retention	Without
------------------	---------

PCB Mount Alignment Type	Locating Posts
--------------------------	----------------

Mating Alignment Type	None
-----------------------	------

Mating Alignment	Without
------------------	---------

PCB Mount Alignment	With
---------------------	------

PCB Mount Retention	Without
---------------------	---------

### Housing Features



Mating Entry Location	Top
Centerline (Pitch)	1 mm [.039 in]
Housing Material	Thermoplastic

### Dimensions

Connector Width	3.81 mm [.15 in]
Connector Height	5.37 mm [.211 in]
Connector Length	34.22 mm [1.347 in]
Stack Height	8 mm, 9 mm, 10 mm [.394 in]

### Usage Conditions

Operating Temperature Range	-55 – 110 °C [-67 – 230 °F]
-----------------------------	-----------------------------

### Operation/Application

Circuit Application	Signal
---------------------	--------

### Industry Standards

Compatible With Agency/Standards Products	CSA, UL
Industry Standard	IEEE 1386
UL Rating	Listed
Compatible With Approved Standards Products	CSA LR7189, UL E28476
UL Flammability Rating	UL 94V-0

### Packaging Features

Packaging Quantity	650
Packaging Method	Tape & Reel

### 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	No Restricted Materials 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

Reflow solder capable to 260°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 # CAT-314-PCB64  
Free Height Plug Connector: Board-Board, Vertical, 64, 1mm



TE Part # 120526-1  
1FHP,64,30A/P,S,N,S09,11,14

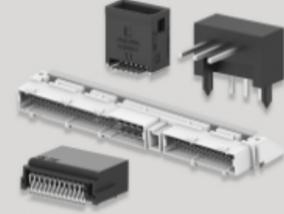


TE Part # 120534-1  
1FHP,64,30A/P,N,C,S10,12,13,15

### Also in the Series | Free Height

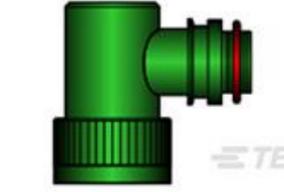


Board-to-Board Headers & Receptacles(739)



PCB Headers & Receptacles(739)

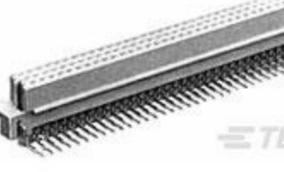
### Customers Also Bought



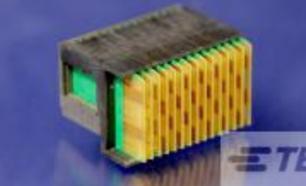
TE Part #837805-000  
TXR40AB90-1004AI



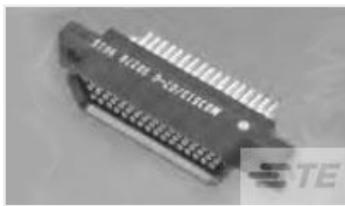
TE Part #3-350944-0  
04P UMNL HDR ASSY R/A 94VO



TE Part #650895-4  
09% EURO TYPE R RECEPT BL ASSY



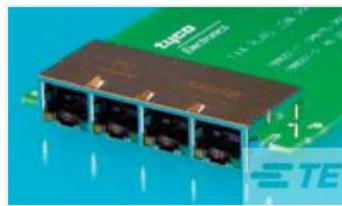
TE Part #1410147-1  
MULTIGIG RT T2 7RW DC DF CT



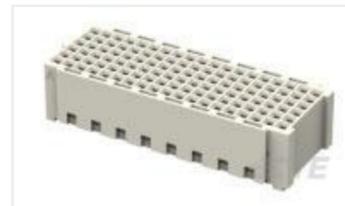
TE Part #8-1532020-7  
095-0604-2037=MCDR3-B-9S5L5-0.5



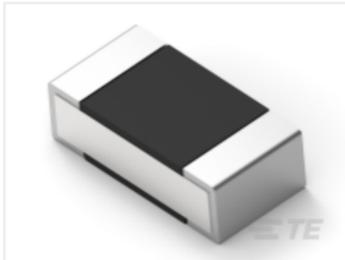
TE Part #3-1676966-7  
SMW2 3R3 5%



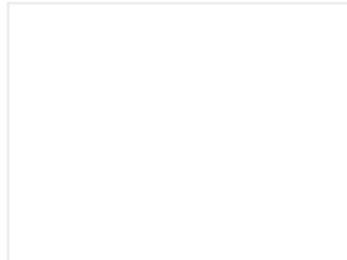
TE Part #1888251-1  
Low Profile,RJ45,1x4,GRN/YEL



TE Part #2102061-6  
Mezalok, Socket, 114 p, 10 mm, 30 Au, LF



TE Part #8-2176310-7  
RP 1E 0.1W 845R 0.1% 25PPM 1K RL



TE Part #ZPF0000000000003790  
732-8219-01 A1064

## Documents

### Product Drawings

[1FHR,64,30A/S,S,N,S08,09,10](#)

English

### CAD Files

#### Customer View Model

[ENG\\_CVM\\_CVM\\_5120521-1\\_A.2d\\_dxf.zip](#)

English

#### 3D PDF

3D

#### Customer View Model

[ENG\\_CVM\\_CVM\\_5120521-1\\_A.3d\\_igs.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_5120521-1\\_A.3d\\_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

### Datasheets & Catalog Pages

[Fine Pitch Stacking Connectors - 1.0mm Free Height \(FH\) \(IEEE 1386\) Connectors](#)

English

### Product Specifications

[Application Specification](#)

English