



Free Height

TE Internal #: 5-5177986-5  
PCB Mount Header, Vertical, Board-to-Board, 120 Position, .8 mm [.031 in] Centerline, Fully Shrouded, Gold, Surface Mount, Signal, Free Height

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Plug Connector: Board-Board, Vertical, 120, 0.8mm



PCB Connector Assembly Type: **PCB Mount Header**  
PCB Mount Orientation: **Vertical**  
Connector System: **Board-to-Board**  
Number of Positions: **120**  
Centerline (Pitch): **.8 mm [ .031 in ]**

[All Free Height Plug Connector: Board-Board, Vertical, 120, 0.8mm \(21\)](#)

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| PCB Connector Assembly Type       | PCB Mount Header      |
| Connector System                  | Board-to-Board        |
| Header Type                       | Fully Shrouded        |
| Sealable                          | No                    |
| Connector & Contact Terminates To | Printed Circuit Board |

Configuration Features

|                              |          |
|------------------------------|----------|
| Stackable                    | Yes      |
| PCB Mount Orientation        | Vertical |
| Number of Positions          | 120      |
| Board-to-Board Configuration | Parallel |

Electrical Characteristics

|                                       |         |
|---------------------------------------|---------|
| Dielectric Withstanding Voltage (Max) | 500 VAC |
| Insulation Resistance                 | 2 MΩ    |
| Operating Voltage                     | 100 VAC |

Body Features

|                                   |         |
|-----------------------------------|---------|
| Assembly Process Feature Material | Steel   |
| Primary Product Color             | Natural |



Contact Features

|                                                         |                 |
|---------------------------------------------------------|-----------------|
| PCB Contact Termination Area Plating Material Thickness | 2 µm[78.74 µin] |
| Contact Layout                                          | Inline          |
| Mating Tab Width                                        | .4 mm[.016 in]  |
| Mating Tab Thickness                                    | .2 mm[.008 in]  |
| PCB Contact Termination Area Plating Material Finish    | Matte           |
| Contact Mating Area Plating Material Finish             | Matte           |
| PCB Contact Termination Area Plating Material           | Tin             |
| Contact Base Material                                   | Brass           |
| Contact Mating Area Plating Material                    | Gold            |
| Contact Mating Area Plating Material Thickness          | .76 µm[30 µin]  |
| Contact Type                                            | Tab             |
| Contact Current Rating (Max)                            | .5 A            |

Termination Features

|                                               |                |
|-----------------------------------------------|----------------|
| Rectangular Termination Post & Tail Thickness | .2 mm[.008 in] |
| Rectangular Termination Post & Tail Width     | .25 mm[.01 in] |
| Termination Method to PCB                     | Surface Mount  |

Mechanical Attachment

|                                   |                    |
|-----------------------------------|--------------------|
| Mounting Alignment Feature Length | .5 mm[.02 in]      |
| PCB Mount Alignment Type          | Positioning Bosses |
| Mating Alignment                  | With               |
| Mating Alignment Type             | Polarization       |
| PCB Mount Retention               | Without            |
| PCB Mount Alignment               | With               |
| Connector Mounting Type           | Board Mount        |

Housing Features

|                       |                |
|-----------------------|----------------|
| Mating Entry Location | Top            |
| Centerline (Pitch)    | .8 mm[.031 in] |
| Housing Material      | Matte          |

Dimensions

|                  |                                            |
|------------------|--------------------------------------------|
| Connector Height | 5 mm[.197 in]                              |
| Stack Height     | 5 mm, 9 mm, 13 mm, 17 mm[.197 in][.354 in] |



[.512 in][.669 in]

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Housing Temperature Rating  | High                       |
| Operating Temperature Range | -40 – 125 °C[-40 – 257 °F] |

Operation/Application

|                          |                      |
|--------------------------|----------------------|
| Assembly Process Feature | Pick and Place Cover |
| Circuit Application      | Signal               |

Industry Standards

|                        |          |
|------------------------|----------|
| UL Flammability Rating | UL 94V-0 |
|------------------------|----------|

Packaging Features

|                    |             |
|--------------------|-------------|
|                    | .5 in       |
| 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 2024 (241)<br>Candidate List Declared Against: JUNE 2024 (241)<br>Does not contain REACH SVHC |
| Halogen Content                               | Low Halogen - Br, Cl, F, I < 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-313-RCB120

Receptacle Connector: Free Height, PCB Mount for Parallel Stacking

Also in the Series | Free Height

PCB Headers & Receptacles(752)

Customers Also Bought

TE Part #1-1932000-0

VERTICAL DDR3 DIMM, 240 POSITION

TE Part #5554216-3

RCPT ASSY,50 POS,VERT MTG,SHLD

TE Part #350432-4

09P UMNL PIN HDR ASSY NATL LF

TE Part #2-1676481-0

CPF 0603 33R 0.1% 25PPM 1K RL

TE Part #2274842-1

HARDWARE KIT, CFP2, 1X1

TE Part #2288221-1

CFP2 EMI/DUST PLUG

TE Part #1470224-2

HPI 2.5MM EMIX A'SSY V/T 2P

TE Part #2-2170754-9

CAGE ASSY, QSFP28 1X1, GASKET, HS, LP



TE Part #2318579-1  
RCPT CONN R/A SMT 76 POSN QSFP-DD

Documents

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_5-5177986-5\_D.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_5-5177986-5\_D.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_5-5177986-5\_D.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 - 0.8mm Free Height (FH) Connectors

English

Product Specifications

Product Specification

English

Product Specification

English

Agency Approvals

UL

English