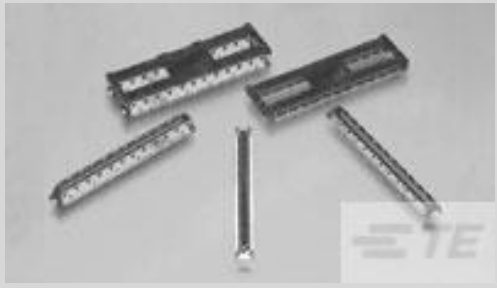




Free Height

TE Internal #: 9-1827231-6  
PCB Mount Receptacle, Vertical, Board-to-Board, 440 Position, .5 mm [.02 in] Centerline, Gold, Surface Mount, Signal, Black, Tray, Free Height  
[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Receptacle**  
PCB Mount Orientation: **Vertical**  
Connector System: **Board-to-Board**  
Number of Positions: **440**  
Centerline (Pitch): **.5 mm [.02 in ]**

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| PCB Connector Assembly Type       | PCB Mount Receptacle  |
| Connector System                  | Board-to-Board        |
| Connector & Contact Terminates To | Printed Circuit Board |

Configuration Features

|                              |          |
|------------------------------|----------|
| Stackable                    | Yes      |
| PCB Mount Orientation        | Vertical |
| Number of Positions          | 440      |
| Board-to-Board Configuration | Parallel |

Electrical Characteristics

|                                       |         |
|---------------------------------------|---------|
| Dielectric Withstanding Voltage (Max) | 200 VAC |
| Insulation Resistance                 | 4 MΩ    |
| Operating Voltage                     | 50 VAC  |

Body Features

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

Contact Features

|                                                         |              |
|---------------------------------------------------------|--------------|
| Contact Mating Area Length                              | 1 mm, 1.3 mm |
| PCB Contact Termination Area Plating Material Thickness | .00005 μm    |
| Contact Layout                                          | Inline       |



|                                                |                     |
|------------------------------------------------|---------------------|
| Mating Tab Width                               | .33 mm[.013 in]     |
| Mating Tab Thickness                           | .2 mm[.008 in]      |
| PCB Contact Termination Area Plating Material  | Gold                |
| Contact Base Material                          | Copper Alloy        |
| Contact Mating Area Plating Material           | Gold                |
| Contact Mating Area Plating Material Thickness | .76 µm[29.9212 µin] |
| Contact Type                                   | Socket              |
| Contact Current Rating (Max)                   | .5 A                |

Termination Features

|                                               |                 |
|-----------------------------------------------|-----------------|
| Rectangular Termination Post & Tail Thickness | .15 mm[.005 in] |
| Rectangular Termination Post & Tail Width     | .9 mm[.035 in]  |
| Termination Method to PCB                     | Surface Mount   |

Mechanical Attachment

|                          |                |
|--------------------------|----------------|
| PCB Mount Alignment Type | Locating Posts |
| PCB Mount Retention Type | Solder Peg     |
| Mating Alignment         | With           |
| Mating Alignment Type    | Polarization   |
| PCB Mount Retention      | With           |
| PCB Mount Alignment      | With           |
| Connector Mounting Type  | Board Mount    |

Housing Features

|                    |                                |
|--------------------|--------------------------------|
| Centerline (Pitch) | .5 mm[.02 in]                  |
| Housing Material   | High Temperature Thermoplastic |

Dimensions

|                  |                     |
|------------------|---------------------|
| Connector Height | 4 mm                |
| Stack Height     | 5 mm, 8 mm[.197 in] |
|                  | .76 in              |

Usage Conditions

|                             |                           |
|-----------------------------|---------------------------|
| Operating Temperature Range | -40 – 85 °C[-40 – 185 °F] |
|-----------------------------|---------------------------|

Operation/Application

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



Industry Standards

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

Packaging Features

|                  |      |
|------------------|------|
| Packaging Method | Tray |
|------------------|------|

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                     | Not reviewed for solder process capability                                                                                      |

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 # 3-1827253-6  
.5FHP05H,220,S,GIG,08/Sn,HT,NSYes

TE Part # 3-6318491-6  
.5FHP08H,220,S,GIG,08/Sn,HT,NSYes





Also in the Series

Free Height

PCB Headers & Receptacles(752)

Customers Also Bought

TE Part #4-2176391-7  
RQ 1206 37K4 0.1% 10PPM 5K RL

TE Part #2176314-4  
MELF SMA\_A 180R 0.1% 15PPM 0102 0.3W

TE Part #1-928836-2  
MOD2 PIN WITH A-PIN L/P

TE Part #7-2176246-6  
CRGS2512 5% 1M8

TE Part #1761072-3  
RECPT,HSSDC2,FIBRE,TRAY PKG

TE Part #3-1415020-1  
PT570N20

TE Part #1-1437581-1  
ASE22RL=AUTOSLIDE DP

Documents

- CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_9-1827231-6\_B.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_9-1827231-6\_B.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_9-1827231-6\_B.3d\_stp.zip

English

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

Datasheets & Catalog Pages



COM Connectors Brochure (English)

English

Product Specifications

Product Specification

English

0.5mm Pitch Board to Board Connector, Free Height Type

English