



Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **20**

Number of Rows: **1**

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

|                                  |              |
|----------------------------------|--------------|
| Connector Contact Load Condition | Fully Loaded |
| PCB Mount Orientation            | Vertical     |
| Number of Positions              | 20           |
| Number of Rows                   | 1            |
| Board-to-Board Configuration     | Parallel     |

Electrical Characteristics

|                                       |         |
|---------------------------------------|---------|
| Dielectric Withstanding Voltage (Max) | 500 VAC |
| Insulation Resistance                 | 5000 MΩ |



|                   |        |
|-------------------|--------|
| Operating Voltage | 30 VAC |
|-------------------|--------|

Body Features

|                       |          |
|-----------------------|----------|
| Connector Profile     | Standard |
| Primary Product Color | Black    |

Contact Features

|                                                         |                               |
|---------------------------------------------------------|-------------------------------|
| Mating Square Post Dimension                            | .38 mm[.015 in]               |
| PCB Contact Termination Area Plating Material Thickness | 3.81 – 6.35 µm[150 – 250 µin] |
| PCB Contact Termination Area Plating Material Finish    | Matte                         |
| Contact Shape & Form                                    | Rectangular                   |
| Contact Underplating Material                           | Nickel                        |
| PCB Contact Termination Area Plating Material           | Tin                           |
| Contact Base Material                                   | Copper Alloy                  |
| Contact Mating Area Plating Material                    | Gold                          |
| Contact Mating Area Plating Material Thickness          | .76 µm[30 µin]                |
| Contact Type                                            | Pin                           |
| Contact Current Rating (Max)                            | 3.6 A                         |

Termination Features

|                                  |                       |
|----------------------------------|-----------------------|
| Termination Post & Tail Diameter | .38 mm[.015 in]       |
| Termination Post & Tail Length   | 2.54 mm[.1 in]        |
| Termination Method to PCB        | Through Hole - Solder |

Mechanical Attachment

|                         |              |
|-------------------------|--------------|
| Mating Retention        | With         |
| Mating Retention Type   | Latching     |
| Mating Alignment        | With         |
| Mating Alignment Type   | Polarization |
| PCB Mount Retention     | Without      |
| PCB Mount Alignment     | Without      |
| Connector Mounting Type | Board Mount  |

Housing Features

|                    |                 |
|--------------------|-----------------|
| Centerline (Pitch) | 1.27 mm[.05 in] |
| Housing Material   | Thermoplastic   |

Dimensions

|  |  |
|--|--|
|  |  |
|--|--|



|                             |                  |
|-----------------------------|------------------|
| PCB Thickness (Recommended) | 1.57 mm[.062 in] |
|-----------------------------|------------------|

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Housing Temperature Rating  | High                       |
| Operating Temperature (Max) | 105 °C[221 °F]             |
| Operating Temperature Range | -65 – 105 °C[-85 – 221 °F] |

Operation/Application

|                        |                |
|------------------------|----------------|
| Solder Process Feature | Board Standoff |
| Circuit Application    | Signal         |

Industry Standards

|                                             |                       |
|---------------------------------------------|-----------------------|
| UL Rating                                   | Recognized            |
| Compatible With Agency/Standards Products   | CSA, UL               |
| Compatible With Approved Standards Products | CSA LR7189, UL E28476 |
| UL Flammability Rating                      | UL 94V-0              |

Packaging Features

|                    |           |
|--------------------|-----------|
| Packaging Quantity | 16        |
| Packaging Method   | Box, Tube |

Other

|                            |   |
|----------------------------|---|
| Position Locations Omitted | 0 |
|----------------------------|---|

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                     | Wave 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-F439-R2435127  
FFC Receptacle Housing: 1.27mm

TE Part # 5-104192-5  
20 SYSTEM 50 RCPT ASSY SRS SN

Also in the Series | AMPMODU System 50

PCB Headers & Receptacles(990)

Customers Also Bought

TE Part #281696-4  
HEADER HE13 STRAIGHT 4 P

TE Part #3-641215-7  
07P MTA100 HDR ASSY FL/ST 30AU

TE Part #5650461-4  
ASSY,RECEPTACLE,EUROCARD,TYPE

TE Part #3-641208-9  
09P MTA156 HDR ASSY FL ST LF



TE Part #5-104666-3  
40 SYSTEM 50 HDR DRST SHRD SN

TE Part #5-1393240-0  
RT334048

TE Part #1658998-1  
Mini DIN, 8 pos, R/A, Shield

TE Part #1-1827872-0  
DYNAMIC 1100D HDR ASSY V 40PX  
BLACK GOLD

TE Part #81117-000  
LS509-51 Liquid Level Sensor

Documents

Product Drawings

20 SYSTEM 50 HDR SRST SHRD SN

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_5-104071-4\_T.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_5-104071-4\_T.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_5-104071-4\_T.3d\_stp.zip

English

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

Datasheets & Catalog Pages

AMPMODU\_INTERCONNECTION\_SYSTEM\_SECTION3AND4

English

AMPMODU SYSTEM 50 QUICK REFERENCE GUIDE

English

AMPMODU SYSTEM 50

English

Product Specifications



Application Specification

English