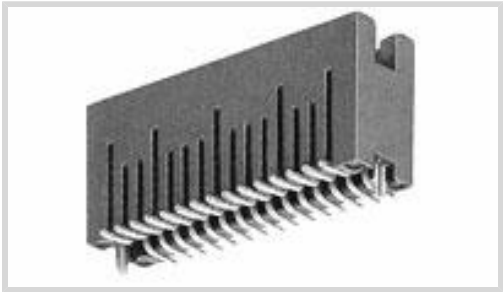




Connectors > PCB Connectors > PCB Headers & Receptacles



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

PCB Mount Orientation: **Vertical**

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

Number of Positions: **20**

Number of Rows: **2**

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                   | 2            |
| Board-to-Board Configuration     | Parallel     |

Electrical Characteristics

|                                       |         |
|---------------------------------------|---------|
| Dielectric Withstanding Voltage (Max) | 300 VAC |
| Operating Voltage                     | 30 VAC  |

Body Features

|                                        |                 |
|----------------------------------------|-----------------|
| PCB Retention Feature Material         | Copper Alloy    |
| PCB Retention Feature Plating Material | Tin over Nickel |
| Connector Profile                      | Standard        |



Primary Product ColorBlack

Contact Features

|                                               |                 |
|-----------------------------------------------|-----------------|
|                                               | 150 µin         |
| Mating Pin Diameter                           | .46 mm[.018 in] |
| Contact Shape & Form                          | Round           |
| Contact Underplating Material                 | Nickel          |
| PCB Contact Termination Area Plating Material | Tin             |
| Contact Base Material                         | Phosphor Bronze |
| Contact Mating Area Plating Material          | Gold            |
| Contact Type                                  | Pin             |
| Contact Current Rating (Max)                  | .5 A            |

Termination Features

|                                             |                 |
|---------------------------------------------|-----------------|
| Round Termination Post & Tail Diameter      | .46 mm[.018 in] |
| Termination Method to Printed Circuit Board | Surface Mount   |

Mechanical Attachment

|                          |                |
|--------------------------|----------------|
| PCB Mount Retention Type | Hold-Down Post |
| Mating Alignment         | With           |
| Mating Alignment Type    | Keyed          |
| PCB Mount Retention      | With           |

Housing Features

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

Dimensions

|                    |                 |
|--------------------|-----------------|
| Row-to-Row Spacing | 1.27 mm[.05 in] |
| Stack Height       | 9.91 mm[.39 in] |

Usage Conditions

|                             |              |
|-----------------------------|--------------|
| Operating Temperature Range | -65 – 105 °C |
|-----------------------------|--------------|

Industry Standards

|                        |                       |
|------------------------|-----------------------|
| Approved Standards     | CSA LR7189, UL E28476 |
| UL Flammability Rating | UL 94V-0              |

Packaging Features

|                    |    |
|--------------------|----|
| Packaging Quantity | 33 |
|--------------------|----|



|                |           |
|----------------|-----------|
| Packaging Type | Box, Tube |
|----------------|-----------|

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 2022 (224)<br>Candidate List Declared Against: JUNE 2022 (224)<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 # 5-104652-2  
20 50/50 GRID DRST SFMNT RCPT

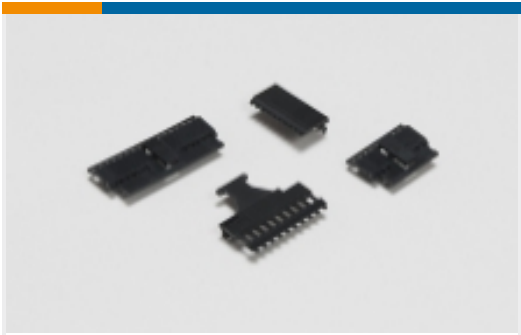
TE Part # 5-147384-2  
20 50/50 GRID SMT RCPT VC LF

Also in the Series | AMPMODU 50/50 Grid

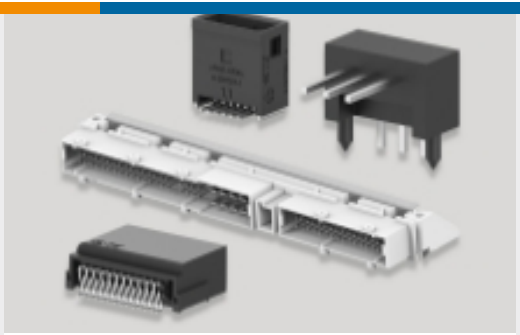




Insertion & Extraction Tools(1)



PCB Connector Covers(9)



PCB Headers & Receptacles(302)



Ribbon Cable Connectors(34)

Documents

Product Drawings

20 50/50 HDR DRST SFMNT.390 SN

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_5-104693-2\_K.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_5-104693-2\_K.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_5-104693-2\_K.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\_SECTION1AND2

English

Ribbon Cable Interconnect Solutions

English

Fine Pitch Stacking Connectors - 1.27mm AMPMODU 50/50 Grid Connectors

English

Stacking Connectors Quick Reference Guide (English)

English

Product Specifications

Application Specification

English

Product Environmental Compliance

MD\_5-104693-2\_04022018024\_dmtec

English



[MD\\_5-104693-2\\_04022018024\\_dmtec](#)

English

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[Agency Approvals](#)

[UL Report](#)

English