

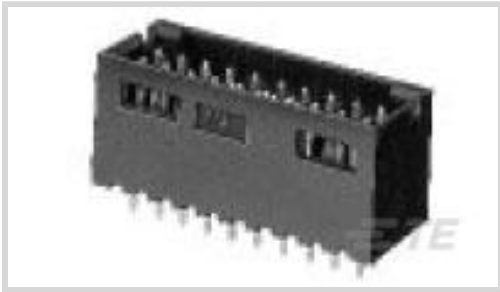
TE Internal #: 103168-4

PCB Mount Header, Vertical, Board-to-Board, 12 Position, 2.54 mm [.1 in] Centerline, Fully Shrouded, Gold (Au), Through Hole - Solder, AMPMODU Headers

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **12**

Number of Rows: **2**

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| PCB Connector Type                | PCB Mount Header      |
| Connector System                  | Board-to-Board        |
| Header Type                       | Fully Shrouded        |
| Connector & Contact Terminates To | Printed Circuit Board |
| Connector Product Type            | Connector Assembly    |

Configuration Features

|                                  |              |
|----------------------------------|--------------|
| Connector Contact Load Condition | Fully Loaded |
| Board-to-Board Configuration     | Parallel     |
| PCB Mount Orientation            | Vertical     |
| Number of Positions              | 12           |
| Number of Rows                   | 2            |

Electrical Characteristics

|                                       |          |
|---------------------------------------|----------|
| Insulation Resistance                 | 5000 MΩ  |
| Dielectric Withstanding Voltage (Max) | 750 Vrms |

Body Features

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

Contact Features



|                                                         |                               |
|---------------------------------------------------------|-------------------------------|
| Contact Underplating Material                           | Nickel                        |
| Contact Mating Area Plating Material Thickness          | .762 μm[30 μin]               |
| Mating Square Post Dimension                            | .64 mm[.025 in]               |
| PCB Contact Termination Area Plating Material Thickness | 2.54 – 5.08 μm[100 – 200 μin] |
| Contact Shape & Form                                    | Square                        |
| Contact Base Material                                   | Phosphor Bronze               |
| PCB Contact Termination Area Plating Material           | Tin-Lead                      |
| Contact Mating Area Plating Material                    | Gold (Au)                     |
| Contact Type                                            | Pin                           |
| Contact Current Rating (Max)                            | 3 A                           |

Termination Features

|                                          |                       |
|------------------------------------------|-----------------------|
| Termination Post & Tail Length           | 3.18 mm[.125 in]      |
| Square Termination Post & Tail Dimension | .64 mm[.025 in]       |
| Termination Method to PCB                | Through Hole - Solder |

Mechanical Attachment

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

Housing Features

|                    |                |
|--------------------|----------------|
| Housing Material   | Thermoplastic  |
| Centerline (Pitch) | 2.54 mm[.1 in] |

Dimensions

|                             |                 |
|-----------------------------|-----------------|
| Row-to-Row Spacing          | 2.54 mm[.1 in]  |
| PCB Thickness (Recommended) | 1.4 mm[.055 in] |

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Housing Temperature Rating  | Standard                   |
| Operating Temperature Range | -65 – 105 °C[-85 – 221 °F] |

Operation/Application

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



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

Industry Standards

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

Packaging Features

|                    |      |
|--------------------|------|
| Packaging Quantity | 136  |
| Packaging Method   | Tray |

Product Compliance

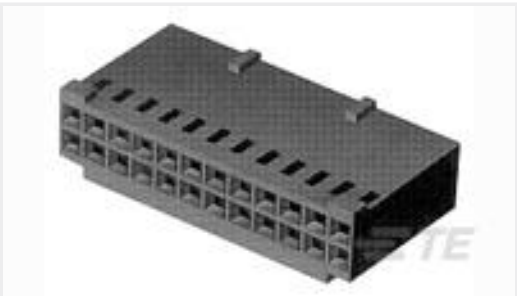
For compliance documentation, visit the product page on TE.com>

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Not Compliant                                                                                                                                                                                                                                                                                                                                                                                                        |
| EU ELV Directive 2000/53/EC                   | Not Compliant                                                                                                                                                                                                                                                                                                                                                                                                        |
| China RoHS 2 Directive MIIT Order No 32, 2016 | Restricted Materials Above Threshold                                                                                                                                                                                                                                                                                                                                                                                 |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JAN 2025 (247)<br>Candidate List Declared Against: JAN 2025 (247)<br>SVHC > Threshold:<br>Pb (40% in 3433454)<br><b>Article Safe Usage Statements:</b><br>Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Recycle if possible and dispose of the article by following all applicable governmental regulations relevant to your geographic location. |
| Halogen Content                               | BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.                                                                                                                                                                                                                                                                                                                                                               |
| Solder Process Capability                     | Wave solder capable to 240°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>

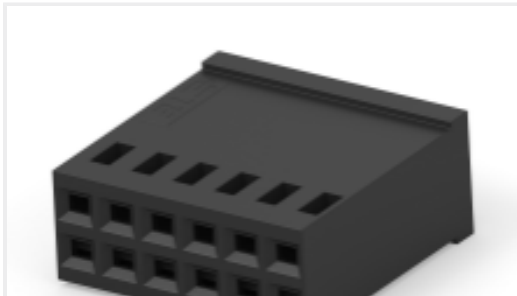
Compatible Parts



TE Part # 3-87977-1  
12 MODIV HSG COMP DR .100 POL



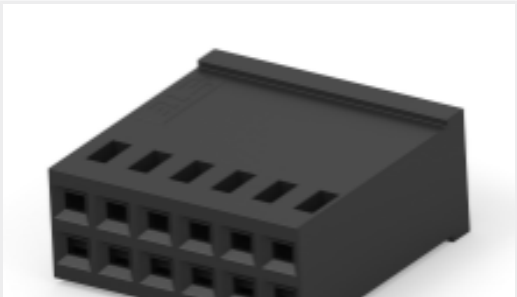
TE Part # 1-86177-3  
12 MODIV HSG COMP DR .100CL



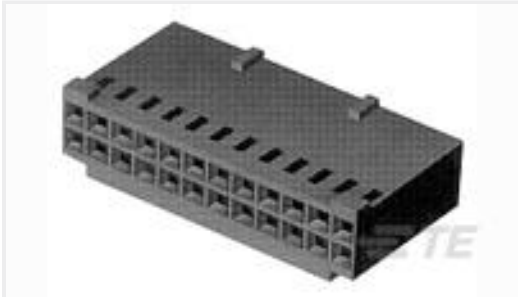
TE Part # 87456-8  
12 MODIV HSG DR MRKD .100CL



TE Part # 87922-2  
12 MODIV HSG W/STR RLF DR MRKD



TE Part # 87456-7  
12 MODIV HSG COMP DR .100CL

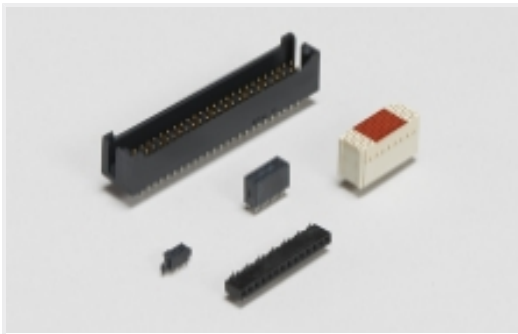


TE Part # 87977-4  
12 MODIV HSG DR MRKD .100 POL

Also in the Series | AMPMODU Headers



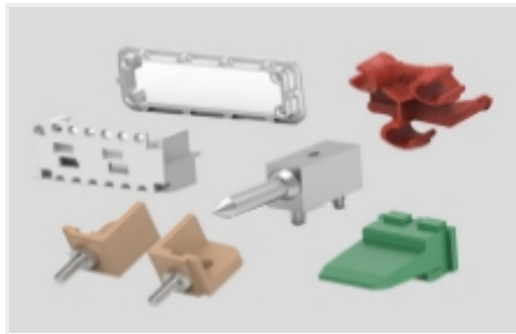
Automotive Headers(1)



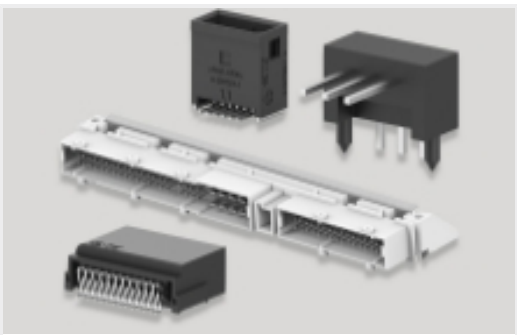
Board-to-Board Headers & Receptacles(1576)



Connector Contacts(47)



Connector Hardware(1)



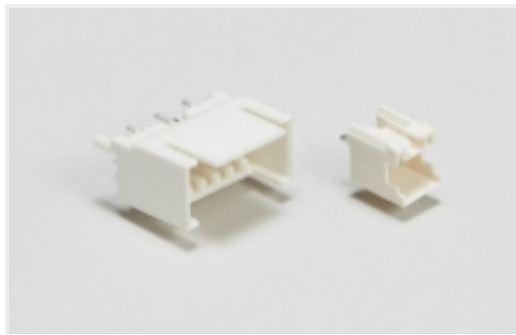
PCB Headers & Receptacles(1621)



Rectangular Power Connectors(43)



Wire-to-Board Connector Assemblies & Housings(5)



Wire-to-Board Headers & Receptacles (114)

Customers Also Bought



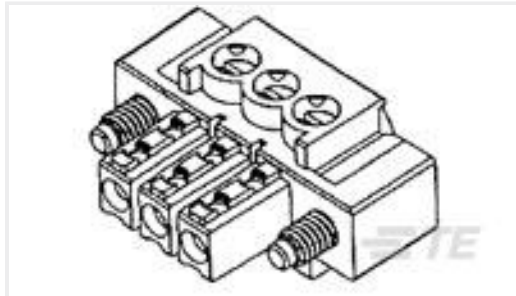
TE Part #5-794637-0  
20P MICRO MNL ASSY,VRT,SMT LF



TE Part #4-794636-2  
12P MICRO MNL ASSY,VRT,SMT,LF



TE Part #5222132-1  
JACK,VERTICAL,PCB,75 OHM,BNC

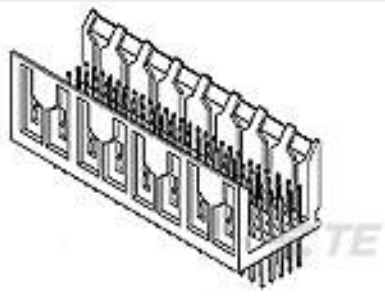


TE Part #284510-2  
2P TERMI-BLOK PLUG CON VITI





TE Part #3-794637-2  
02P MICRO MNL ASSY,VRT,SMT LF



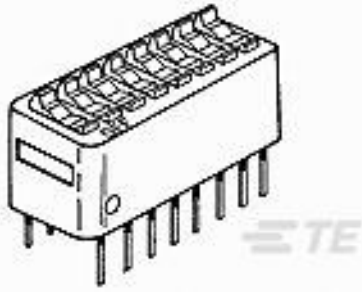
TE Part #5223002-2  
FB-5R,ASY,060,SIG,HDR,EN,4.25



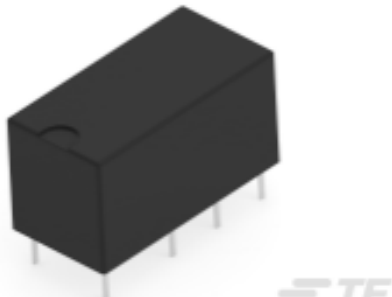
TE Part #YDTS20W13-98PCV001  
RECP ASSY



TE Part #5-2301996-8  
RJ45 JACK INT.MAG. 1GB LED 1X2



TE Part #435640-2  
DIP SW 4POSN AU



TE Part #1393793-2  
V23105A5306A201

Documents

Product Drawings

12 MODII HDR DRST SHRD .100CL

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_103168-4\_M.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_103168-4\_M.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_103168-4\_M.3d\_stp.zip

English

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