

5-103168-9  ACTIVE

## AMPMODU | AMPMODU Headers

TE Internal #: 5-103168-9

PCB Mount Header, Vertical, Board-to-Board, 22 Position, 2.54 mm

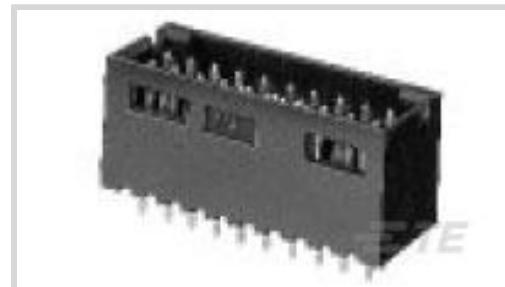
[.1 in] Centerline, Fully Shrouded, Gold, Through Hole - Solder,

AMPMODU Headers

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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: **22**

Number of Rows: **2**

## Features

### Product Type Features

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

### Configuration Features

Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	22
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

Mating Square Post Dimension	.64 mm[.025 in]
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PCB Contact Termination Area Plating Material Thickness 2.54 - 5.08  $\mu\text{m}$ [100 - 200  $\mu\text{in}$ ]

Contact Shape & Form Square

Contact Underplating Material Nickel

PCB Contact Termination Area Plating Material Tin

Contact Base Material Phosphor Bronze

Contact Mating Area Plating Material Gold

Contact Mating Area Plating Material Thickness .762  $\mu\text{m}$ [30  $\mu\text{in}$ ]

Contact Type Pin

Contact Current Rating (Max) 3 A

#### Termination Features

Square Termination Post & Tail Dimension .64 mm[.025 in]

Termination Post & Tail Length 3.18 mm[.125 in]

Termination Method to Printed Circuit Board Through Hole - Solder

#### Mechanical Attachment

Mating Retention With

Mating Retention Type Detent Window

Mating Alignment With

Mating Alignment Type Polarization

PCB Mount Retention Without

PCB Mount Alignment Without

Connector Mounting Type Board Mount

#### Housing Features

Centerline (Pitch) 2.54 mm[.1 in]

Housing Material Thermoplastic

#### 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	160
Packaging Method	Tray

### Product Compliance

For compliance documentation, visit the product page on [TE.com](https://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: JAN 2024 (240) Candidate List Declared Against: JAN 2024 (240) Does not contain REACH SVHC
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>

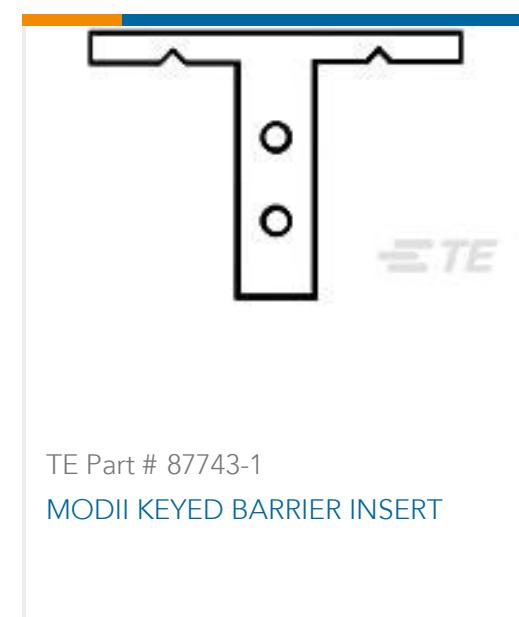
### Compatible Parts



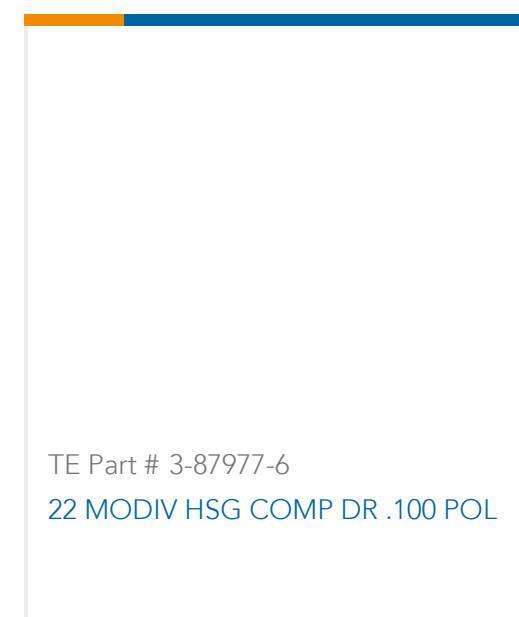
TE Part # 1-87456-7  
22 MODIV HSG COMP DR .100CL



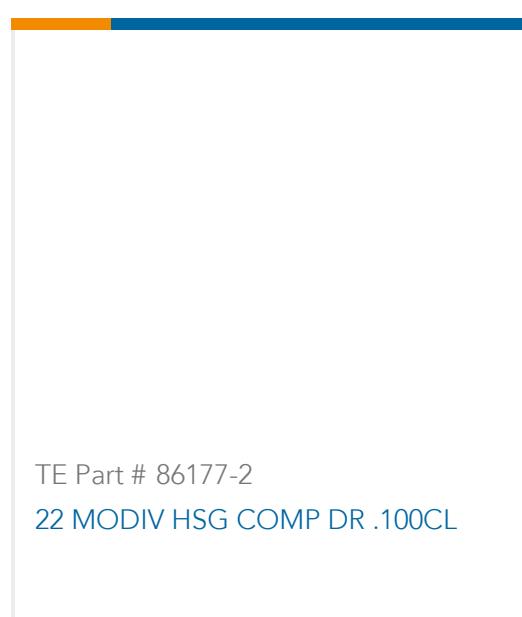
TE Part # 102394-9  
22 AMP MODU MT HSG DR .100CL



TE Part # 87743-1  
MODII KEYED BARRIER INSERT



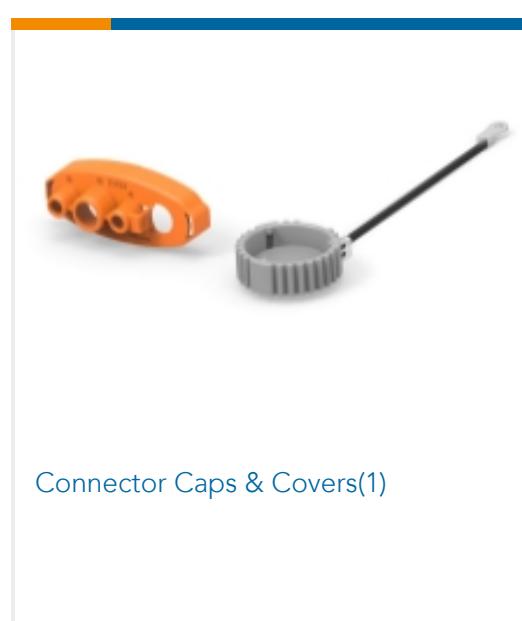
TE Part # 3-87977-6  
22 MODIV HSG COMP DR .100 POL



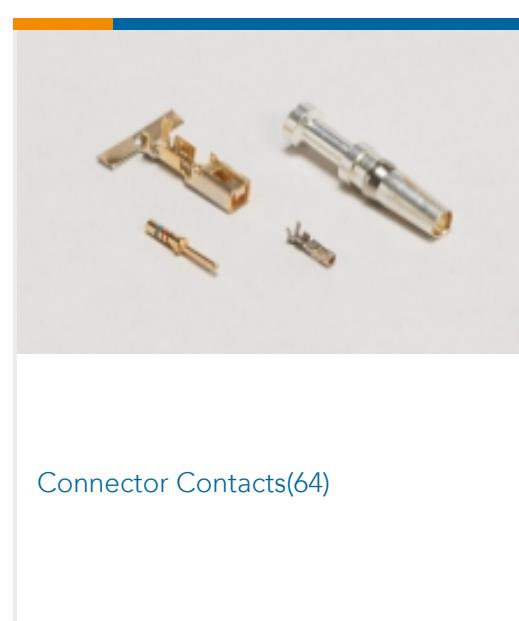
TE Part # 86177-2  
22 MODIV HSG COMP DR .100CL

## Also in the Series

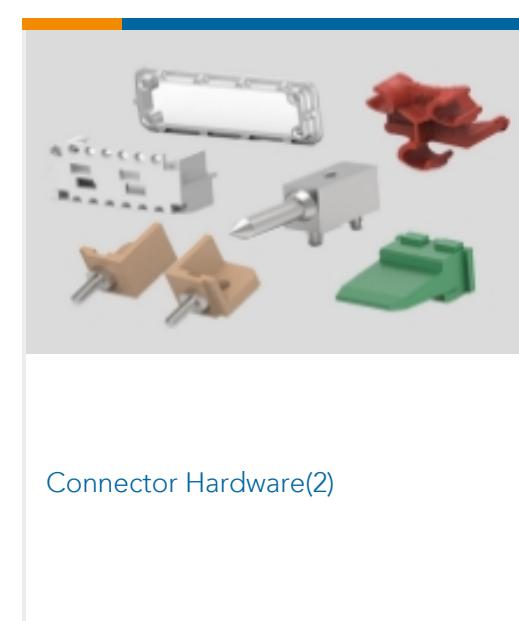
### AMPMODU Headers



Connector Caps & Covers(1)



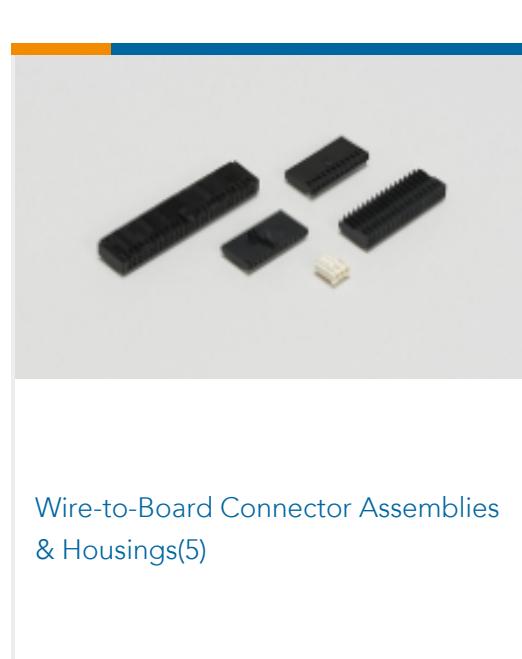
Connector Contacts(64)



Connector Hardware(2)



PCB Headers & Receptacles(4349)



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

## Customers Also Bought



TE Part # 1-1393258-5  
V23047-A1024-A501



TE Part # 87523-6  
MOD IV RECP LP



TE Part # 7-1879213-8  
CPF 0402 187R 0.1% 25PPM 1K RL



TE Part # 9-2176089-2  
RP 1J 0.166W 107K 0.1% 25PPM 1K RL



TE Part # 4-1393247-2  
W31-X2M1G-5=W23/W31

## Documents

### Product Drawings

#### 22 MODII HDR DRST SHRD .100CL

English

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### CAD Files

#### 3D PDF

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_5-103168-9\\_M.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5-103168-9\\_M.3d\\_jgs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5-103168-9\\_M.3d\\_stp.zip](#)

English

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### Datasheets & Catalog Pages

#### AMPMODU\_INTERCONNECTION\_SYSTEM\_SECTIONS5

English