

# 103166-3 Datasheet

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DiGi Electronics Part Number	103166-3-DG
Manufacturer	<a href="#">TE Connectivity AMP Connectors</a>
Manufacturer Product Number	103166-3
Description	CONN HEADER R/A 10POS 2.54MM
Detailed Description	Connector Header Through Hole, Right Angle 10 position 0.100" (2.54mm)

This model 103166-3 is available at DiGi Electronics.

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## Purchase and inquiry

Manufacturer Product Number:

103166-3

Series:

AMPMODU Mod II

Connector Type:

Header

Pitch - Mating:

0.100" (2.54mm)

Number of Rows:

2

Number of Positions Loaded:

All

Shrouding:

Shrouded - 4 Wall

Termination:

Solder

Contact Length - Mating:

0.318" (8.08mm)

Overall Contact Length:

-

Contact Shape:

Square

Contact Finish Thickness - Mating:

30.0µin (0.76µm)

Contact Material:

Phosphor Bronze

Features:

-

Ingress Protection:

-

Insulation Color:

Black

Voltage Rating:

-

Contact Finish Thickness - Post:

100.0µin (2.54µm)

Base Product Number:

103166

Manufacturer:

TE Connectivity AMP Connectors

Product Status:

Active

Contact Type:

Male Pin

Number of Positions:

10

Row Spacing - Mating:

0.100" (2.54mm)

Style:

Board to Board or Cable

Mounting Type:

Through Hole, Right Angle

Fastening Type:

Detent Lock

Contact Length - Post:

0.135" (3.43mm)

Insulation Height:

0.400" (10.16mm)

Contact Finish - Mating:

Gold

Contact Finish - Post:

Tin-Lead

Insulation Material:

Thermoplastic

Operating Temperature:

-65°C ~ 105°C

Material Flammability Rating:

UL94 V-0

Current Rating (Amps):

3A

Mated Stacking Heights:

-

Applications:

-

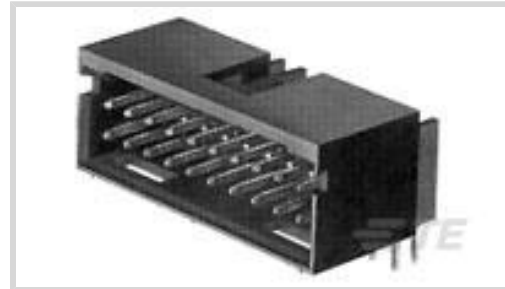
103166-3 ✓ ACTIVE[AMPMODU](#) | [AMPMODU Headers](#)

TE Internal #: 103166-3

PCB Mount Header, Right Angle, Board-to-Board / Wire-to-Board,  
10 Position, 2.54 mm [.1 in] Centerline, Fully Shrouded, Gold (Au),  
AMPMODU Headers

[View on TE.com >](#)

Connectors &gt; PCB Connectors &gt; PCB Headers &amp; Receptacles

PCB Connector Type: **PCB Mount Header**PCB Mount Orientation: **Right Angle**Connector System: **Board-to-Board, Wire-to-Board**Number of Positions: **10**Number of Rows: **2**

## Features

### Product Type Features

PCB Connector Type	PCB Mount Header
Connector System	Board-to-Board, Wire-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
PCB Mount Orientation	Right Angle
Number of Positions	10
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
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PCB Mount Header, Right Angle, Board-to-Board / Wire-to-Board, 10 Position, 2.54 mm [.1 in] Centerline, Fully Shrouded, Gold (Au), AMPMODU Headers

Contact Mating Area Plating Material Thickness	.762 $\mu\text{m}$ [30 $\mu\text{in}$ ]
Mating Square Post Dimension	.64 mm[.025 in]
PCB Contact Termination Area Plating Material Thickness	2.54 – 5.08 $\mu\text{m}$ [100 – 200 $\mu\text{in}$ ]
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	3.43 mm[.135 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 $^{\circ}\text{C}$ [-85 – 221 $^{\circ}\text{F}$ ]

#### Operation/Application

Solder Process Feature	Board Standoff
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PCB Mount Header, Right Angle, Board-to-Board / Wire-to-Board, 10 Position, 2.54 mm [.1 in] Centerline, Fully Shrouded, Gold (Au), AMPMODU Headers

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>](#)

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: JUNE 2024 (241) Candidate List Declared Against: JUNE 2024 (241) SVHC > Threshold: Pb (40% in Component Part) <b>Article Safe Usage Statements:</b> 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>

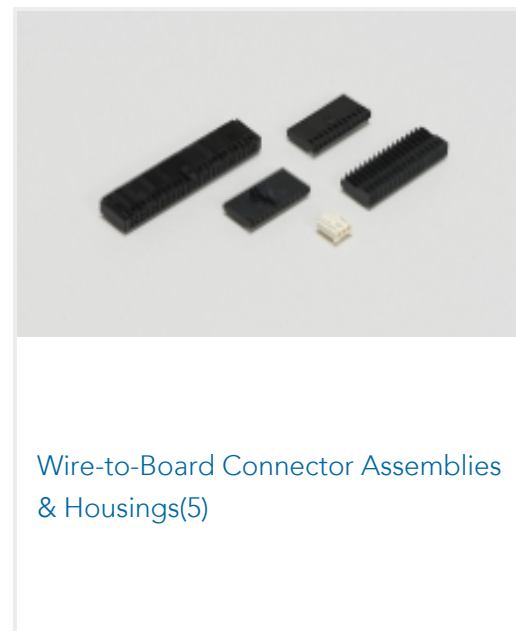
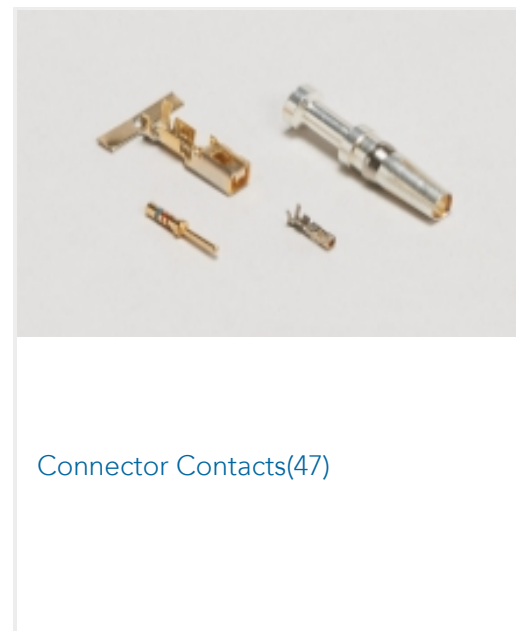
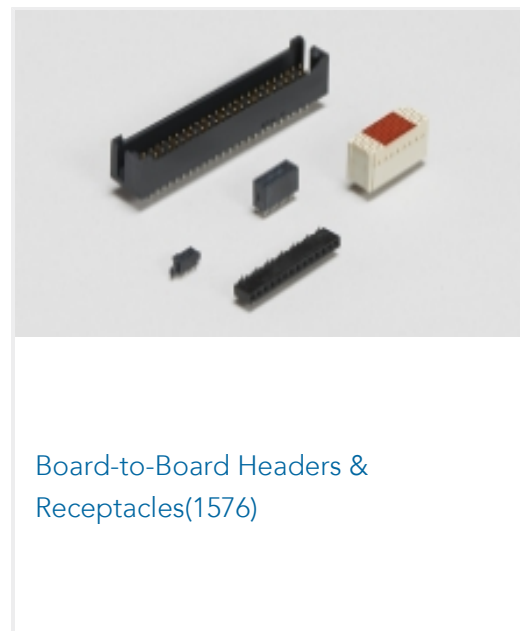
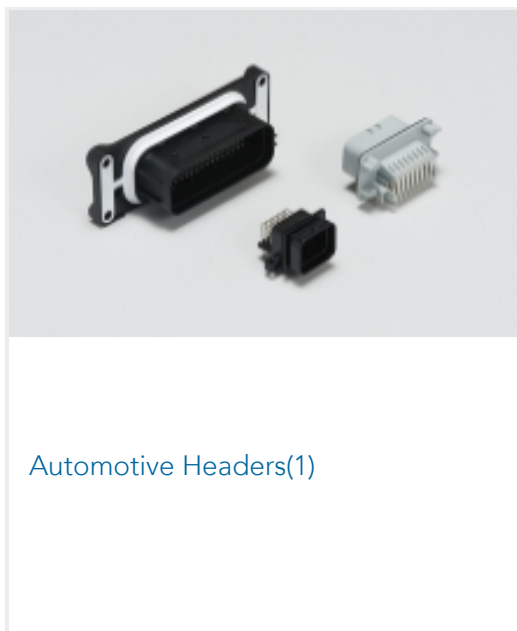
**Compatible Parts**



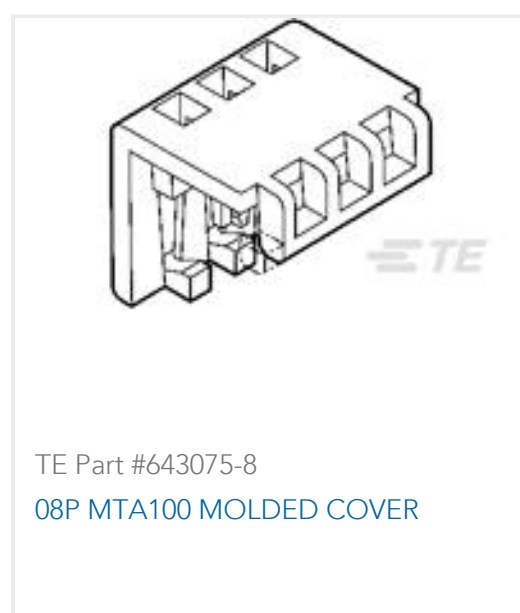
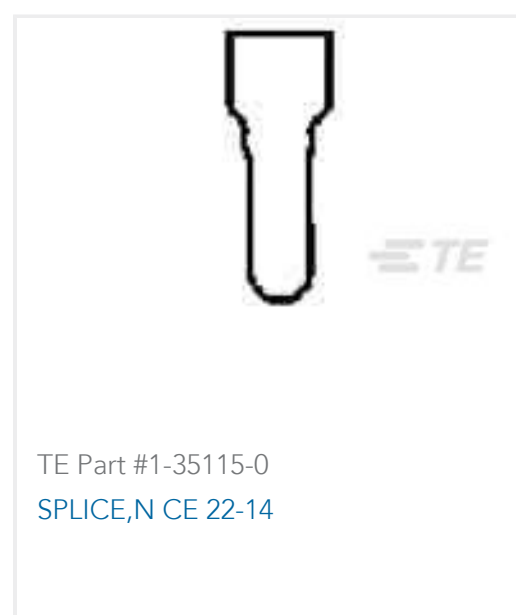
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Also in the Series | **AMPMODU Headers**



Customers Also Bought





PCB Mount Header, Right Angle, Board-to-Board / Wire-to-Board, 10 Position, 2.54 mm [.1 in] Centerline, Fully Shrouded, Gold (Au), AMPMODU Headers



TE Part #K1008006  
Relay 26-71-01



TE Part #E4100402BGM  
E4100402BGM=RELAY

## Documents

### Product Drawings

[10 MODII HDR DRRR SHRD .100CL](#)

English

### CAD Files

[3D PDF](#)

English

Customer View Model

[ENG\\_CVM\\_103166-3\\_K.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_103166-3\\_K.3d\\_igs.zip](#)

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Customer View Model

[ENG\\_CVM\\_103166-3\\_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](#)

[AMPMODU Interconnection System](#)

English

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