

1-174960-1 ✓ ACTIVE

Multilock Connector System

TE Internal #: 1-174960-1

PCB Mount Header, Vertical, Wire-to-Board, 20 Position, 3.5 mm [.138 in] Centerline, Fully Shrouded, Tin, Multilock Connector System

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Connectors > PCB Connectors > PCB Headers & Receptacles > LOW & MEDIUM POWER HEADER



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

Number of Positions: **20**

Centerline (Pitch): **3.5 mm [.138 in]**

Sealable: **No**

PCB Mount Orientation: **Vertical**

[All LOW & MEDIUM POWER HEADER \(152\)](#)

Features

Product Type Features

Hybrid Header	No
Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Header
Header Type	Fully Shrouded
Connector System	Wire-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Configuration Features

Number of Sections	1
Number of Signal Positions	20
Number of Positions	20
PCB Mount Orientation	Vertical
Number of Rows	2



Electrical Characteristics

Voltage Rating (Max)	12 VDC
Nominal Voltage Architecture	12 V
Operating Voltage	12 VDC

Body Features

Primary Product Color	White
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Contact Features

Contact Size	1.8mm
Contact Type	Tab
Mating Tab Width	1.8 mm[.071 in]
Mating Tab Thickness	.64 mm[.025 in]
Contact Mating Area Plating Material	Tin

Termination Features

Termination Method to Printed Circuit Board	Through Hole - Solder
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Mechanical Attachment

Mounting Holes	With
Mating Retention	With
Mating Alignment	With
PCB Mount Alignment	Without
Panel Mount Feature	Without
PCB Mount Retention	Without
PCB Mount Retention Type	Mounting Hole
Mating Retention Type	Locking Interface

Housing Features

Centerline (Pitch)	3.5 mm[.138 in]
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Dimensions

Connector Length	15.8 mm[.622 in]
Connector Width	46.7 mm[1.839 in]
PCB Thickness (Recommended)	1.6 mm[.063 in]
Profile Height from PCB	23.5 mm[.925 in]

Usage Conditions

Operating Temperature (Max)	65 °C, 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100
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°C, 105 °C[149 °F][158 °F][167 °F][176 °F]
[185 °F][194 °F][212 °F][221 °F]

Operating Temperature Range

-30 – 105 °C[-22 – 221 °F]

Operation/Application

Shielded

No

Circuit Application

Signal

Industry Standards

UL Flammability Rating

UL 94V-0

Packaging Features

Packaging Type

Tube

Packaging Quantity

50

Other

Interface Number

174952

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)
Candidate List Declared Against: JUNE
2022 (224)
Does not contain REACH SVHC

Halogen Content

Not Low Halogen - contains Br or Cl > 900
ppm.

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



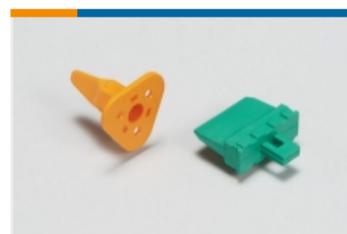
Also in the Series | Multilock Connector System



Automotive Connector Caps & Covers (16)



Automotive Connector EMC Shielding (1)



Automotive Connector Locks & Position Assurance(2)



Automotive Housings(572)



Automotive Seals & Cavity Plugs(2)



Automotive Terminals(140)



Insertion & Extraction Tools(6)



Other Automotive Connector Accessories(9)



PCB Headers & Receptacles(127)

Documents

[Product Drawings](#)
070 MLC CAP ASSY V 20P

Japanese

[CAD Files](#)



3D PDF

3D

Customer View Model

[ENG_CVM_CVM_1-174960-1_G.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-174960-1_G.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-174960-1_G.3d_stp.zip](#)

English

3D PDF

English

Customer View Model

[ENG_CVM_1-174960-1_E.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_1-174960-1_E.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_1-174960-1_E.3d_stp.zip](#)

English

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

Product Specifications

Product Specification

Japanese

[.070 Series Multilock I/O Connector \(MLC\) MK-II for P.C.B.](#)

Japanese

Product Specification

Japanese

Instruction Sheets

Customer Manual (non U.S.)

English

070 MULTI-LOCK CONNECTOR

English