

1-174960-1 ✓ ACTIVE

## Multilock Connector System

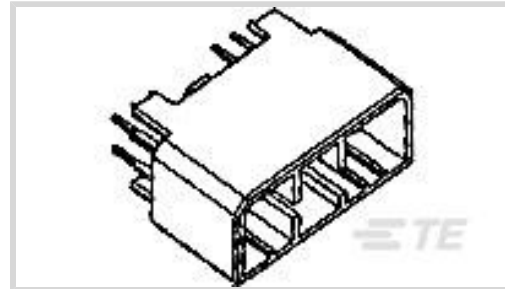
TE Internal #: 1-174960-1

Multilock Connector System, Automotive Headers, 20 Position, 3.5 mm [.138in] Centerline, Vertical, 2 Row, White, Through Hole - Solder, Tin (Sn)

[View on TE.com >](#)



Connectors > Automotive Connectors > Automotive Headers > LOW & MEDIUM POWER HEADER



Number of Positions: 20

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

Sealable: No

PCB Mount Orientation: Vertical

Number of Rows: 2

[All LOW & MEDIUM POWER HEADER \(159\)](#)

## Features

### Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Hybrid Header                     | No                    |
| 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 |
|-----------------------|-------|

### Contact Features

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



|                                      |                 |
|--------------------------------------|-----------------|
| Mating Tab Width                     | 1.8 mm[.071 in] |
| Mating Tab Thickness                 | .64 mm[.025 in] |
| Contact Mating Area Plating Material | Tin (Sn)        |

#### Termination Features

|   |                       |
|---|-----------------------|
| Termination Method to Printed Circuit Board | Through Hole - Solder |
|---|-----------------------|

#### Mechanical Attachment

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

#### Housing Features

|                    |                 |
|--------------------|-----------------|
| Centerline (Pitch) | 3.5 mm[.138 in] |
|--------------------|-----------------|

#### Dimensions

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

#### Usage Conditions

|                             |  |
|-----------------------------|--|
| Operating Temperature (Max) | 65 °C, 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °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: JAN 2021 (211)<br>Candidate List Declared Against: JAN 2021 (211)<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                     | 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



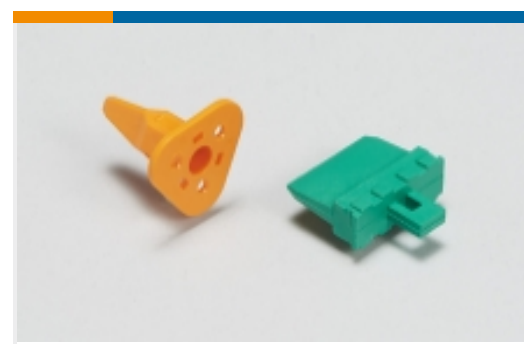
Also in the Series | [Multilock Connector System](#)



Automotive Connector Caps & Covers (16)



Automotive Connector EMC Shielding (1)



Automotive Connector Locks & Position Assurance(2)



Automotive Headers(138)



Automotive Housings(576)



Automotive Seals & Cavity Plugs(2)



Automotive Terminals(142)



Insertion & Extraction Tools(6)

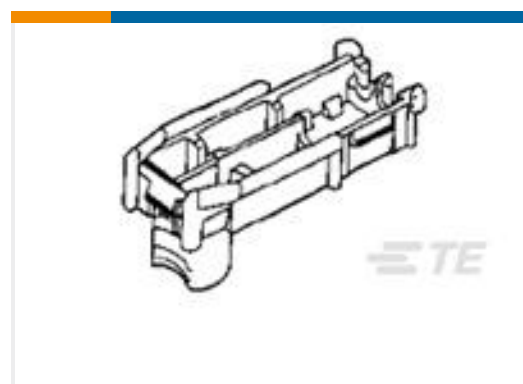


Other Automotive Connector Accessories(9)

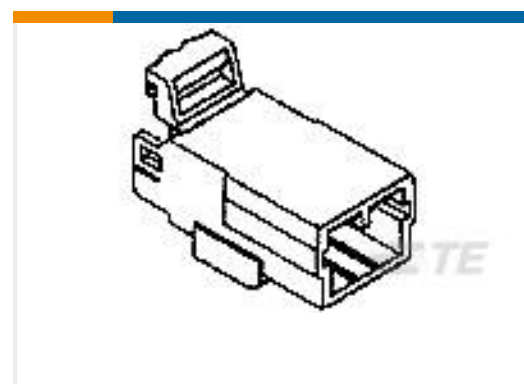
## Customers Also Bought



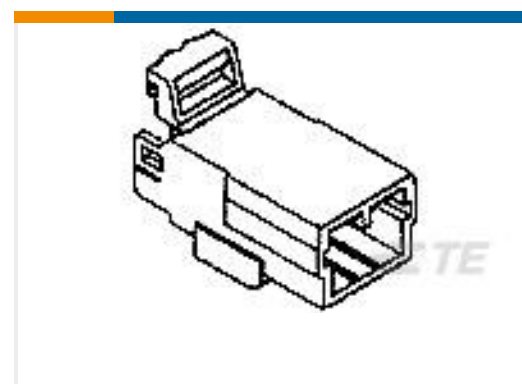
TE Part #1-174933-1  
MULTILOCK, CONNECTOR HOUSING



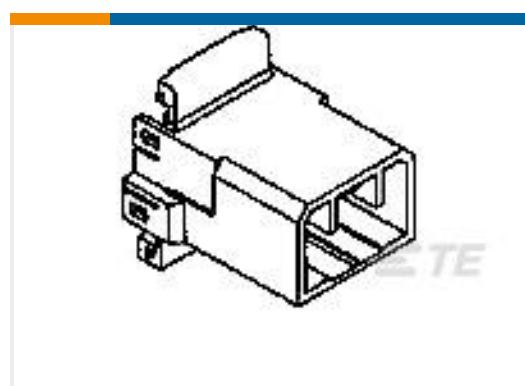
TE Part #353378-7  
SQUIB CONN HSG YELLOW



TE Part #1-174928-1  
070 MLC W-W CAP HSG 3P F/A



TE Part #1-174930-1  
070 MLC W-W CAP HSG 6P F/A



TE Part #1-174936-1  
070 MLC W-W CAP HSG 20P F/A

## Documents



### Product Drawings

#### 070 MLC CAP ASSY V 20P

Japanese

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### CAD Files

#### 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.

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### Product Specifications

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

Japanese

#### Product Specification

Japanese

#### Product Specification

Japanese

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### Instruction Sheets

#### Customer Manual (non U.S.)

English

#### 070 MULTI-LOCK CONNECTOR

English