

103309-5 ✓ ACTIVE

## AMP-LATCH

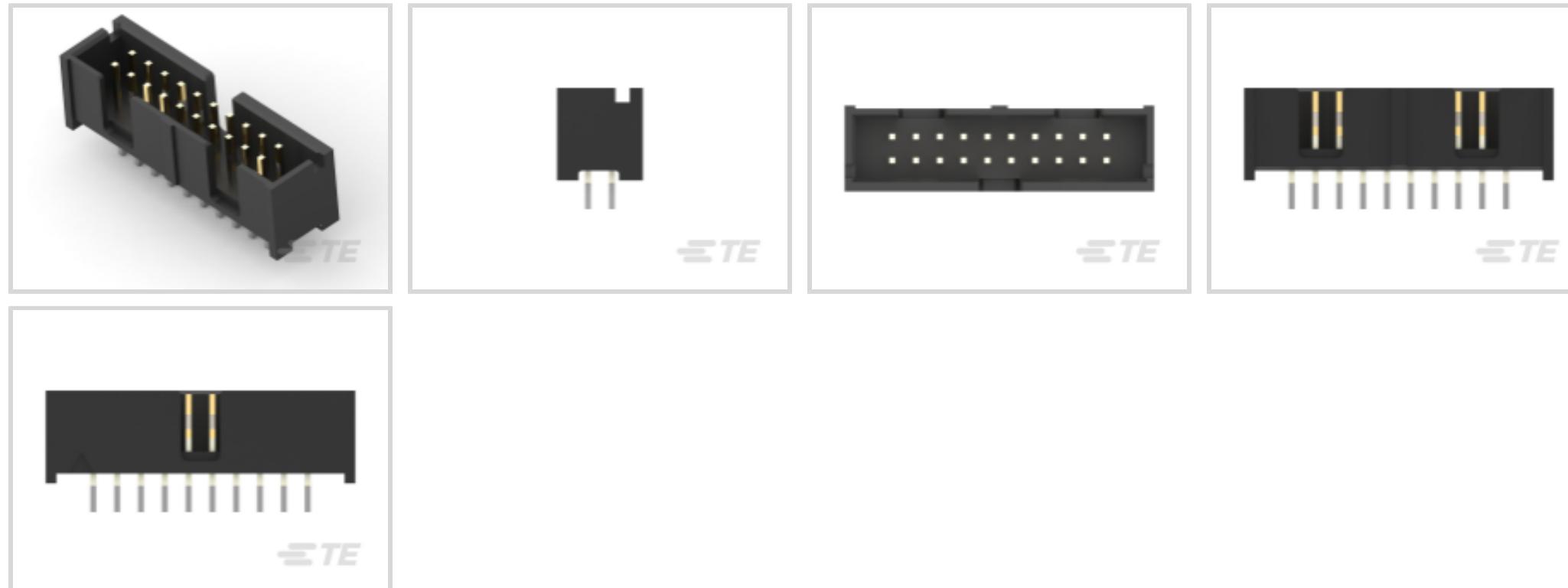
TE Internal #: 103309-5

Board-to-Board, 20 Position, 2.54 mm [.1 in] Centerline, Vertical, Through Hole - Solder, 2 Row, Receptacle, Low Profile, Ribbon Cable Connectors

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Connectors > PCB Connectors > Wire-to-Board Connectors > FFC, FPC & Ribbon Connectors > Ribbon Cable Connectors



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

Number of Positions: **20**

Centerline (Pitch): **2.54 mm [.1 in]**

PCB Mount Retention: **Without**

PCB Mount Orientation: **Vertical**

## Features

### Electrical Characteristics

|                       |         |
|-----------------------|---------|
| Insulation Resistance | 5000 MΩ |
|-----------------------|---------|

### Industry Standards

|                        |          |
|------------------------|----------|
| UL Flammability Rating | UL 94V-0 |
|------------------------|----------|

### Packaging Features

|                    |    |
|--------------------|----|
| Packaging Quantity | 75 |
|--------------------|----|

|                  |      |
|------------------|------|
| Packaging Method | Tube |
|------------------|------|

### Usage Conditions

|                            |          |
|----------------------------|----------|
| Housing Temperature Rating | Standard |
|----------------------------|----------|

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

### Operation/Application

|                        |               |
|------------------------|---------------|
| Solder Process Feature | Solder Dipped |
|------------------------|---------------|

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

### Contact Features

|   |   |
|---|---|
| Contact Underplating Material                           | Nickel  |
|   | 30 $\mu$ in   |
| Mating Square Post Dimension                            | .64 mm [.025 in]                                      |
| Contact Shape & Form                                    | Square  |
| PCB Contact Termination Area Plating Material Thickness | 2.54 $\mu$ m [100 $\mu$ in]                           |
| Contact Mating Area Plating Material                    | Gold Flash, Gold Flash over Palladium<br>Nickel, Gold |
| Contact Base Material                                   | Copper Alloy  |
| PCB Contact Termination Area Plating Material           | Tin-Lead  |
| Contact Type  | Pin   |
| Contact Current Rating (Max)                            | 1 A   |

### Body Features

|                       |       |
|-----------------------|-------|
| Daisy Chain           | With  |
| Primary Product Color | Black |
| Connector Profile     | Low   |

### Dimensions

|                        |                  |
|------------------------|------------------|
| Shrouded End Dimension | 3.81 mm [.15 in] |
| Connector Height       | 9.77 mm [.38 in] |
| Connector Length       | 1.3 mm, 33.02 mm |
| Row-to-Row Spacing     | 2.54 mm [.1 in]  |

### Termination Features

|  |                       |
|--|-----------------------|
| Termination Post & Tail Length           | 3.05 mm [.12 in]      |
| Square Termination Post & Tail Dimension | .64 mm [.025 in]      |
| Termination Method to PCB                | Through Hole - Solder |

### Mechanical Attachment

|                         |                             |
|-------------------------|-----------------------------|
| Panel Mount Feature     | Without                     |
| Mating Alignment        | With                        |
| PCB Mount Alignment     | With                        |
| PCB Mount Retention     | Without                     |
| Mating Alignment Type   | Dual Polarizing Bar, Center |
| Mating Retention        | Without                     |
| Connector Mounting Type | Board Mount                 |

### Housing Features

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

#### Product Type Features

|                                    |                       |
|------------------------------------|-----------------------|
| Connector Product Type             | Connector Assembly    |
| Ribbon Cable Connector Header Type | Pin Header            |
| Connector System                   | Board-to-Board        |
| Connector & Housing Type           | Receptacle            |
| Connector & Contact Terminates To  | Printed Circuit Board |

#### Configuration Features

|                       |          |
|-----------------------|----------|
| Number of Positions   | 20       |
| PCB Mount Orientation | Vertical |
| Number of Rows        | 2        |

#### Other

|                    |                           |
|--------------------|---------------------------|
| EU RoHS Compliance | Not Compliant             |
| EU ELV Compliance  | Compliant with Exemptions |

#### Product Compliance

For compliance documentation, visit the product page on [TE.com](http://TE.com)>

|   |   |
|---|---|
| EU RoHS Directive 2011/65/EU                  | Not Compliant   |
| EU ELV Directive 2000/53/EC                   | Compliant with Exemptions   |
| 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)<br>Candidate List Declared Against: JUNE 2024 (241)<br>SVHC > Threshold:<br>Pb (13% in Component Part) |

Article Safe Usage Statements:  
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. |
|-----------------|--|

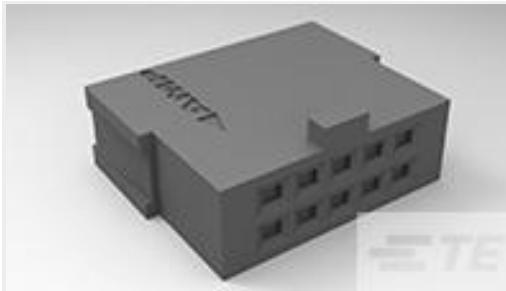
|                           |                               |
|---------------------------|-------------------------------|
| Solder Process Capability | Not lead free process capable |
|---------------------------|-------------------------------|

#### 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

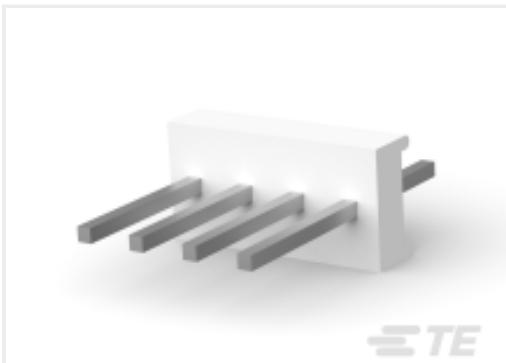
chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may 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 # 487223-6  
024 HOUSING FFC RCPT 100CL DR

## Customers Also Bought



TE Part #CAT-104MTA-PVUNH  
PCB Header: Polyester, Vertical,  
Unshrouded, No Mating Alignment



TE Part #1625854-3  
0603 PROBE PAD



TE Part #1-1337452-0  
BNC Ins BHSkt 50Ohm Nickel Gol



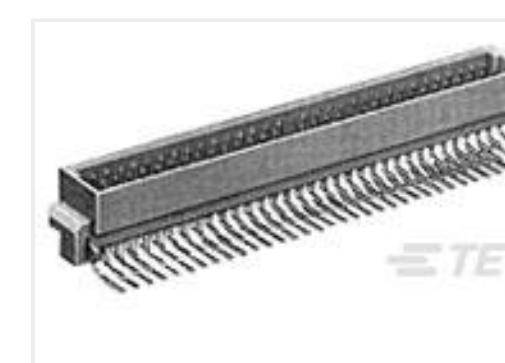
TE Part #1-826631-6  
AMPMODU II HEADER



TE Part #1877285-3  
03P EP SHRD HDR ASMY, WHITE



TE Part #1877285-5  
05P EP SHRD HDR ASMY, WHITE



TE Part #650948-5  
048 EURO TYPE C PIN ST ASSY



TE Part #4-2176389-6  
RQ 1206 316R 0.1% 10PPM 5K RL



TE Part #7-520315-0  
TRIOMATE ASY V 20P L=3.556LDFR

## Documents

**Product Drawings**[020 LOPRO HDR SP 30DP](#)

English

**CAD Files**[3D PDF](#)

3D

**Customer View Model**[ENG\\_CVM\\_CVM\\_103309-5\\_N.2d\\_dxf.zip](#)

English

**Customer View Model**[ENG\\_CVM\\_CVM\\_103309-5\\_N.3d\\_igs.zip](#)

English

**Customer View Model**[ENG\\_CVM\\_CVM\\_103309-5\\_N.3d\\_stp.zip](#)

English

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

English

**Agency Approvals**[Agency Approval Document](#)

English