



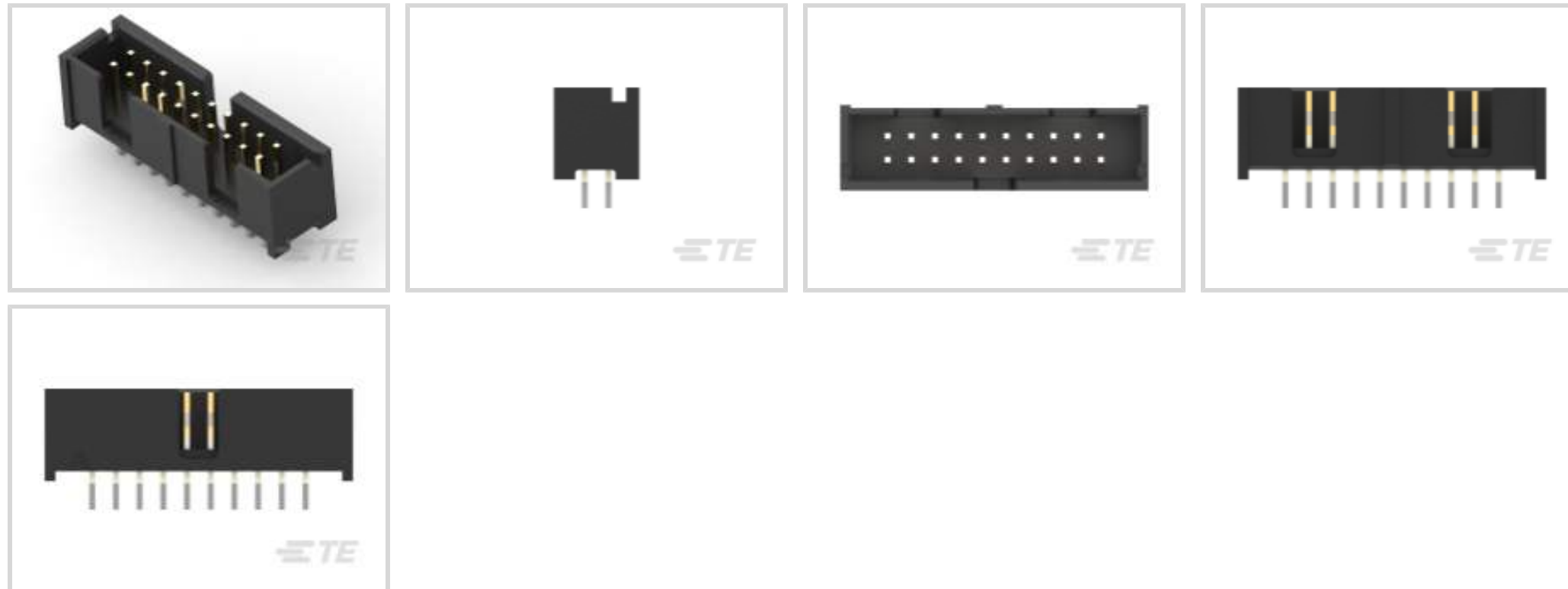
**AMP-LATCH**

TE Internal #: 103309-5

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

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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**

**Product Type Features**

Ribbon Cable Connector Header Type	Pin Header
Connector Product Type	Connector Assembly
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

**Electrical Characteristics**

Insulation Resistance	5000 MΩ
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**Body Features**

Daisy Chain	With
Primary Product Color	Black



Connector Profile	Low
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### Contact Features

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

### Termination Features

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

### Mechanical Attachment

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

### Housing Features

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

### Dimensions

Connector Length	1.3 mm, 33.02 mm
Shrouded End Dimension	3.81 mm[.15 in]
Connector Height	9.77 mm[.38 in]



Row-to-Row Spacing 2.54 mm [.1 in]

**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

**Industry Standards**

UL Flammability Rating UL 94V-0

**Packaging Features**

Packaging Quantity 75  
 Packaging Method Tube

**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	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 2023 (235) Candidate List Declared Against: JAN 2023 (233) SVHC > Threshold: Pb (13% in Component Part) <small><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.</small>
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

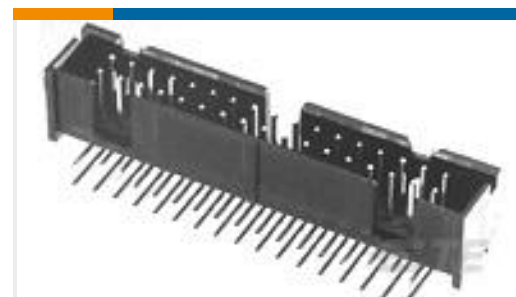
## Customers Also Bought



TE Part #2-2176054-6  
RLP73K 2A R56 5% 5K RL



TE Part #643414-3  
03P UMNL HDR ASSY POL 94VO LF



TE Part #103311-1  
010 LOPRO HDR RA 30DP



TE Part #1825096-1  
TPA11CGPC004



TE Part #2154640-2  
Herm Blade & Recept assy w/latch & posts



TE Part #5-146282-4  
04 MODII HDR SRST B/A .100CL



TE Part #1-2232829-3  
SG12.0 HEADER ASSEMBLY SMT 3P, KEY A,NTL

## 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

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**Product Specifications**

[Product Specification](#)

English

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**Product Environmental Compliance**

[TE Material Declaration](#)

English

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**Agency Approvals**

[Agency Approval Document](#)

English