

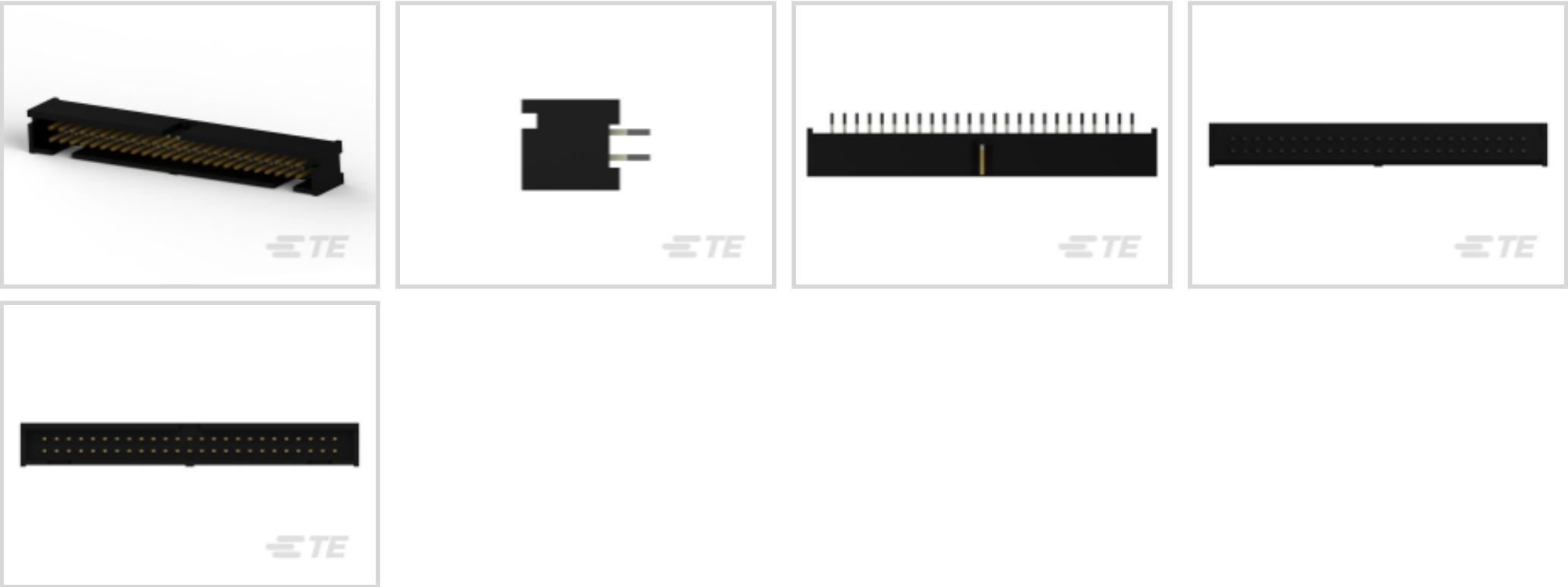


AMP-LATCH

TE Internal #: 1-5103309-0  
Ribbon Cable Connectors, Wire-to-Board, 50 Position, 2.54 mm [.1 in] Centerline, Vertical, Through Hole - Solder, 2 Row, Plug, Low Profile

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



Connector System: **Wire-to-Board**  
Number of Positions: **50**  
Centerline (Pitch): **2.54 mm [ .1 in ]**  
PCB Mount Retention: **Without**  
PCB Mount Orientation: **Vertical**

Features

Product Type Features

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

Configuration Features

|                       |          |
|-----------------------|----------|
| Number of Positions   | 50       |
| PCB Mount Orientation | Vertical |
| Number of Rows        | 2        |

Electrical Characteristics

|                       |         |
|-----------------------|---------|
| Insulation Resistance | 5000 MΩ |
| Operating Voltage     | 250 VAC |

Body Features



|                   |      |
|-------------------|------|
| Daisy Chain       | With |
| Connector Profile | Low  |

Contact Features

|                                                         |                                        |
|---------------------------------------------------------|----------------------------------------|
| Mating Square Post Dimension                            | .64 mm[.025 in]                        |
| PCB Contact Termination Area Plating Material Thickness | 2.54 μm[100 μin]                       |
| Contact Type                                            | Pin                                    |
|                                                         | 30 μin                                 |
| Contact Mating Area Plating Material                    | Gold, Gold Flash over Palladium Nickel |
| Contact Shape & Form                                    | Square                                 |
| Contact Underplating Material                           | Nickel                                 |
| PCB Contact Termination Area Plating Material           | Tin                                    |
| 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     | Without                     |
| 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   | Glass Filled Nylon/PBT |
| Housing Color      | Black                  |
| Centerline (Pitch) | 2.54 mm[.1 in]         |

Dimensions

|                        |                  |
|------------------------|------------------|
| Shrouded End Dimension | 3.81 mm[.15 in]  |
| Connector Length       | 58.42 mm[2.3 in] |



|                    |                  |
|--------------------|------------------|
| Connector Height   | 8.81 mm[.347 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

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

Industry Standards

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

Packaging Features

|                    |      |
|--------------------|------|
| Packaging Quantity | 35   |
| Packaging Method   | Tube |

Other

|         |                        |
|---------|------------------------|
| Comment | Mates with Receptacles |
|---------|------------------------|

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)<br>Candidate List Declared Against: JUNE 2022 (224)<br>Does not contain REACH SVHC |
| Halogen Content                               | BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.                                                                          |
| Solder Process Capability                     | Wave solder capable to 265°C                                                                                                    |

Product Compliance Disclaimer

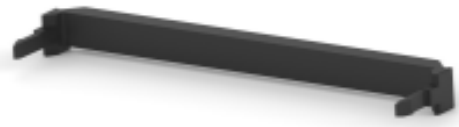
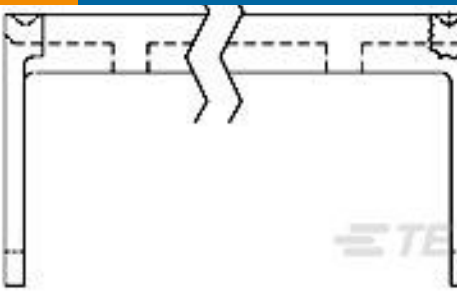
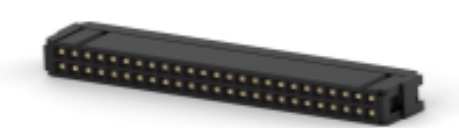
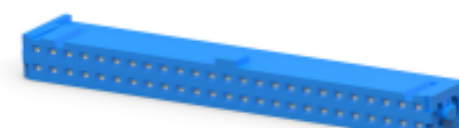
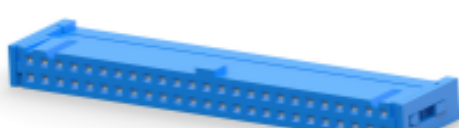
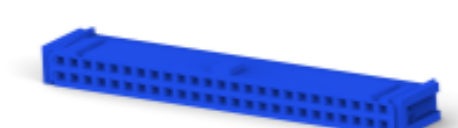
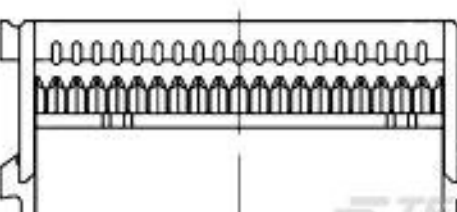
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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

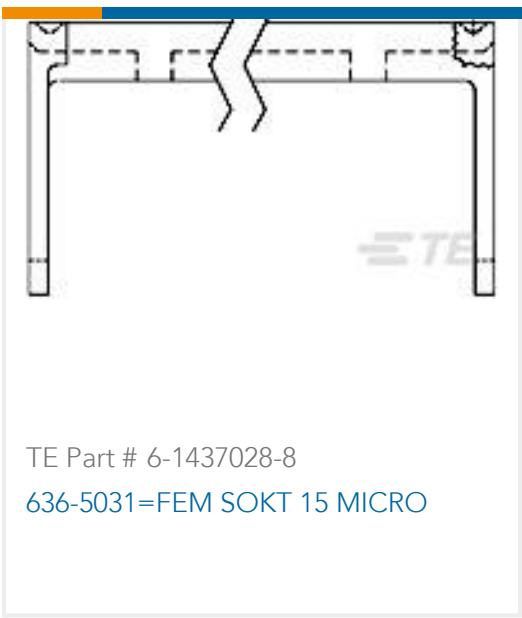




on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) ‘Guidance on requirements for substances in articles’ posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts

|                                                                                                                                                 |                                                                                                                                                 |                                                                                                                                                   |                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>TE Part # 499252-4<br>050 STRAIN RELIEF A-L RCPT           | <br>TE Part # 8-1437021-1<br>609-5031HD=FSKT IDC S 50 SR       | <br>TE Part # 1-102387-0<br>50 MODIV HSG COMP DR .100 POL      | <br>TE Part # 1-1658622-0<br>50 NOVO MIL/CTR 30DP,LEAD FREE    |
| <br>TE Part # 1-1658620-0<br>50 NOVO MIL 15DP, LEAD FREE     | <br>TE Part # 1-1658621-0<br>50 NOVO MIL/CTR 15DP,LEAD FREE  | <br>TE Part # 1-1658623-0<br>50 NOVO MIL 30DP, LEAD FREE     | <br>TE Part # 2-1658526-3<br>609-5030LF FEM SOCKET,LEAD FREE |
| <br>TE Part # 2-1658526-4<br>609-5041LF FEM SOCKET,LEAD FREE | <br>TE Part # 1-1658527-4<br>622-5030LF FEM SOCKET,LEAD FREE | <br>TE Part # 1-1658527-5<br>622-5041LF FEM SOCKET,LEAD FREE | <br>TE Part # 1658528-8<br>636-5041LF FEM SOCKET,LEAD FREE   |
| <br>TE Part # 1-1658624-0<br>050 NOVO DUAL 30DP FT           | <br>TE Part # 2-1658526-2<br>609-5001MLF FEM SCKT,LEAD FREE  | <br>TE Part # 2-1658528-0<br>636-5030LF=FEM SKT BLADE POL 1  | <br>TE Part # 1-1437025-2<br>622-5031=FSKT IDC S 50 SR       |



Documents

Product Drawings

A/L LOW PRO HDR 50P VERT BLACK

English

CAD Files

3D PDF

English

Customer View Model

ENG\_CVM\_1-5103309-0\_B.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_1-5103309-0\_B.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_1-5103309-0\_B.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\_SECTION5

English

Ribbon Cable Interconnect Solutions

English

Product Specifications

Product Specification

English

Product Environmental Compliance

MD\_1-5103309-0\_03292018717\_dmtec

English

MD\_1-5103309-0\_03292018717\_dmtec

English