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Rectangular Power Connector Type: **Header**

Connector & Housing Type: **Plug**

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

Number of Positions: **10**

Centerline (Pitch): **4.2 mm [ .165 in ]**

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Rectangular Power Connector Type  | Header                |
| Connector & Housing Type          | Plug                  |
| Connector System                  | Wire-to-Board         |
| Sealable                          | No                    |
| Connector & Contact Terminates To | Printed Circuit Board |

Configuration Features

|                           |          |
|---------------------------|----------|
| Number of Positions       | 10       |
| PCB Mount Orientation     | Vertical |
| Number of Power Positions | 10       |
| Number of Rows            | 2        |

Electrical Characteristics

|                   |         |
|-------------------|---------|
| Operating Voltage | 600 VAC |
|-------------------|---------|

Contact Features

|                |                |
|----------------|----------------|
| Contact Layout | Inline, Matrix |
|----------------|----------------|



|                                                |                 |
|------------------------------------------------|-----------------|
| Contact Current Rating (Max)                   | 9 A             |
| Contact Retention Within Housing               | Without         |
| Contact Type                                   | Pin             |
| PCB Contact Termination Area Plating Material  | Tin             |
| Contact Mating Area Plating Material           | Tin             |
| Contact Mating Area Plating Material Thickness | 2.03 µm[80 µin] |

Termination Features

|                                             |                       |
|---------------------------------------------|-----------------------|
| Termination Post & Tail Length              | 3.5 mm[.138 in]       |
| Termination Method to Printed Circuit Board | Through Hole - Solder |

Mechanical Attachment

|                         |             |
|-------------------------|-------------|
| Mating Alignment Type   | Keyed       |
| Mating Alignment        | With        |
| PCB Mount Alignment     | Without     |
| PCB Mount Retention     | Without     |
| Connector Mounting Type | Board Mount |
| Mating Retention        | With        |
| Mating Retention Type   | Latch       |

Housing Features

|                    |                 |
|--------------------|-----------------|
| Centerline (Pitch) | 4.2 mm[.165 in] |
| Housing Color      | Natural         |
| Housing Material   | Nylon           |

Dimensions

|                                        |                              |
|----------------------------------------|------------------------------|
| Insulation Diameter (Max)              | 2.39 mm[2.39 in]             |
| Row-to-Row Spacing                     | 4.2 mm[.165 in]              |
| PCB Thickness (Recommended)            | .06 mm[1.6 in]               |
| Width                                  | 9.75 mm[.384 in]             |
| Accepts Wire Insulation Diameter Range | 1.2 – 3.1 mm[.047 – .122 in] |
| Height                                 | 12.8 mm[.504 in]             |
| Length                                 | 22.2 mm[.874 in]             |

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -40 – 105 °C[-40 – 221 °F] |
|-----------------------------|----------------------------|

Operation/Application

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



|                     |       |
|---------------------|-------|
| Circuit Application | Power |
|---------------------|-------|

Identification Marking

|                                |      |
|--------------------------------|------|
| Circuit Identification Feature | With |
|--------------------------------|------|

Industry Standards

|                        |                               |
|------------------------|-------------------------------|
| UL Flammability Rating | UL 94V-0                      |
| Glow Wire Rating       | Standard Part - Not Glow Wire |
| Agency/Standard Number | E28476                        |
| Agency/Standard        | UL                            |
| UL Rating              | Recognized                    |
| VDE Tested             | No                            |

Packaging Features

|                    |                  |
|--------------------|------------------|
| Packaging Method   | Box & Tray, Tray |
| Packaging Quantity | 255              |

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: 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 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



TE Part # 1-1586019-0  
10P RCPT VAL-U-LOK V0



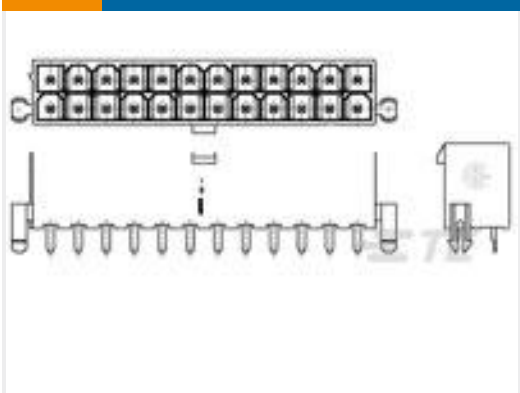
TE Part # 1-1969612-0  
10P FH PLUG VAL-U-LOK V0



TE Part # 1-1969613-0  
10P PM PLUG VAL-U-LOK V0



TE Part # 1-2029035-0  
10P PLUG VAL-U-LOK PM V0 BLK



TE Part # 1-2029172-0  
10P VRT HDR VAL-U-LOK V2 W/ODH

## Documents

### Product Drawings

10P VRT HDR VAL-U-LOK V0

English

### CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_1-1586038-0\_C.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_1-1586038-0\_C.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_1-1586038-0\_C.3d\_stp.zip

English

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

### Datasheets & Catalog Pages

SOFT\_SHELL\_PIN\_AND\_SOCKET\_CONNECTORS\_CATALOG

English

### Product Specifications



Product Specification

English

Agency Approvals

UL Report

English