



VAL-U-LOK

TE Internal #: 1586863-8  
Header, Plug, Wire-to-Board, 8 Position, 4.2 mm [.165 in]  
Centerline, Printed Circuit Board, UL 94V-2, Rectangular Power  
Connectors

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Connectors > Power Connectors > Rectangular Power > Rectangular Power Connectors



Rectangular Power Connector Type: **Header**  
Connector & Housing Type: **Plug**  
Connector System: **Wire-to-Board**  
Number of Positions: **8**  
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        | 8           |
| PCB Mount Orientation      | Right Angle |
| Number of Power Positions  | 8           |
| Number of Signal Positions | 0           |
| Number of Rows             | 2           |

Electrical Characteristics

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

Contact Features



|                                               |                |
|-----------------------------------------------|----------------|
| Contact Layout                                | Inline, Matrix |
| Contact Mating Area Plating Material          | Tin            |
| Contact Current Rating (Max)                  | 9 A            |
| Contact Retention Within Housing              | Without        |
| Contact Type                                  | Pin            |
| PCB Contact Termination Area Plating Material | Tin            |

Termination Features

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

Mechanical Attachment

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

Housing Features

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

Dimensions

|                                      |                              |
|--------------------------------------|------------------------------|
| Compatible Insulation Diameter (Max) | 2.39 mm[2.39 in]             |
| Connector Height                     | 9.8 mm[.386 in]              |
| PCB Thickness (Recommended)          | .06 mm[1.6 in]               |
| Product Width                        | 13 mm[.512 in]               |
| Product Length                       | 18 mm[.709 in]               |
| Compatible Insulation Diameter Range | 1.2 – 3.1 mm[.047 – .122 in] |
| Row-to-Row Spacing                   | 5.5 mm[.216 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

|                                             |                           |
|---------------------------------------------|---------------------------|
| CSA Rating                                  | 208567                    |
| UL Rating                                   | Recognized                |
| Compatible With Agency/Standards Products   | CSA, UL                   |
| Compatible With Approved Standards Products | UL E28476                 |
| UL Flammability Rating                      | UL 94V-2                  |
| Glow Wire Rating                            | GWT 750°C (Without Flame) |

Packaging Features

|                    |                  |
|--------------------|------------------|
| Packaging Quantity | 210              |
| Packaging Method   | Box & Tray, Tray |

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 2024 (241)<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

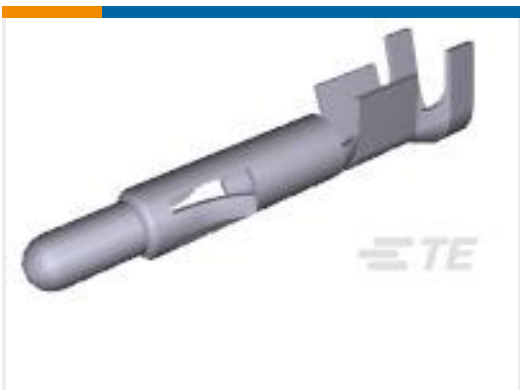
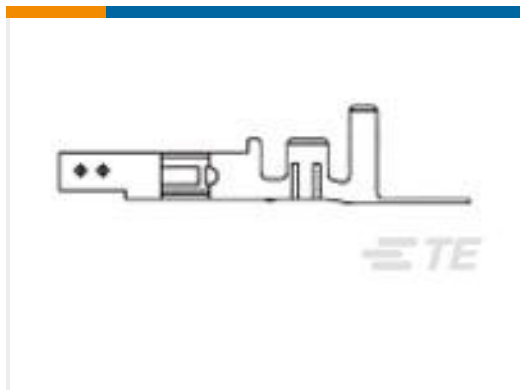
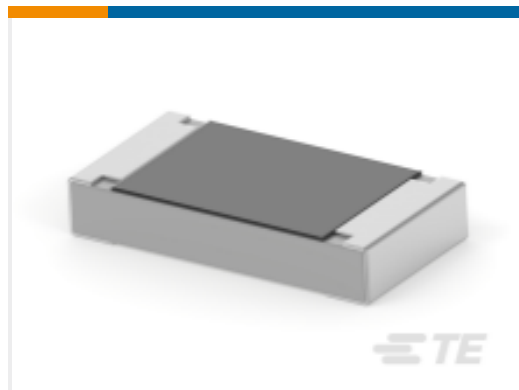
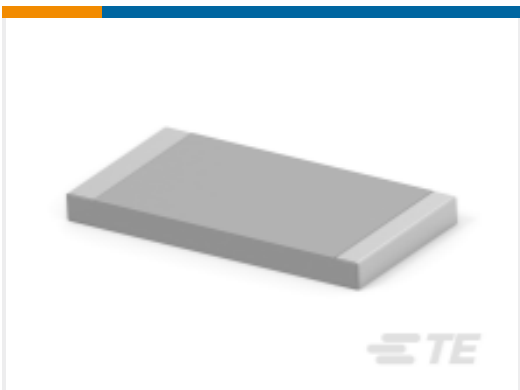
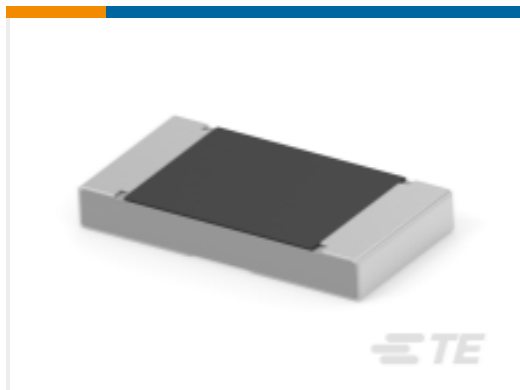
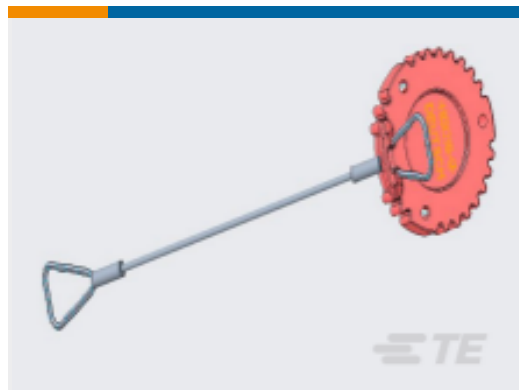


requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts

|                                                                                                                                                 |                                                                                                                                                  |                                                                                                                                                       |                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <div>TE Part # 1586862-8<br/>8P FH PLUG VAL-U-LOK FH GW</div> |  <div>TE Part # 1586861-8<br/>8P PM PLUG VAL-U-LOK PM GW</div> |  <div>TE Part # 2296206-8<br/>8P FH PLUG VAL-U-LOK FH GWT/V0</div> |  <div>TE Part # 2296207-8<br/>8P PM PLUG VAL-U-LOK PM GWT/V0</div> |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|

Customers Also Bought

|                                                                                                                                                 |                                                                                                                                                  |                                                                                                                                                       |                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <div>TE Part #350547-3<br/>UMNL PIN 20-14 PTPPHBZ L/P</div> |  <div>TE Part #1625854-3<br/>0603 PROBE PAD</div>            |  <div>TE Part #794956-3<br/>VAL-U-LOK SKT PHBZ SN 22-18AWG</div> |  <div>TE Part #3-2176344-3<br/>CRGCO 1206 220K 5%</div>                     |
|  <div>TE Part #1-2176331-7<br/>CRGP 2512 220R 1%</div>       |  <div>TE Part #2-1969599-4<br/>24P PM PLUG VAL-U-LOKV2</div> |  <div>TE Part #2-2176528-3<br/>3503G 2B 10K 1% 5K RL</div>       |  <div>TE Part #HDC16-9-L47N<br/>DUST CAP, 9P, REC, GRY, LANYARD, HD10</div> |

Documents

Product Drawings  
8P VAL-U-LOK R/A HDR GW  
English

CAD Files  
3D PDF  
3D  
Customer View Model  
ENG\_CVM\_CVM\_1586863-8\_GN.2d\_dxf.zip  
English  
Customer View Model  
ENG\_CVM\_CVM\_1586863-8\_GN.3d\_igs.zip



English

Customer View Model

[ENG\\_CVM\\_CVM\\_1586863-8\\_GN.3d\\_stp.zip](#)

English

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

Datasheets & Catalog Pages

[VAL-U-LOK\\_GLOW\\_WIRE\\_CONNECTORS](#)

English

Product Specifications

[Application Specification](#)

English

Instruction Sheets

[Instruction Sheet \(U.S.\)](#)

English

Agency Approvals

[UL Report](#)

English