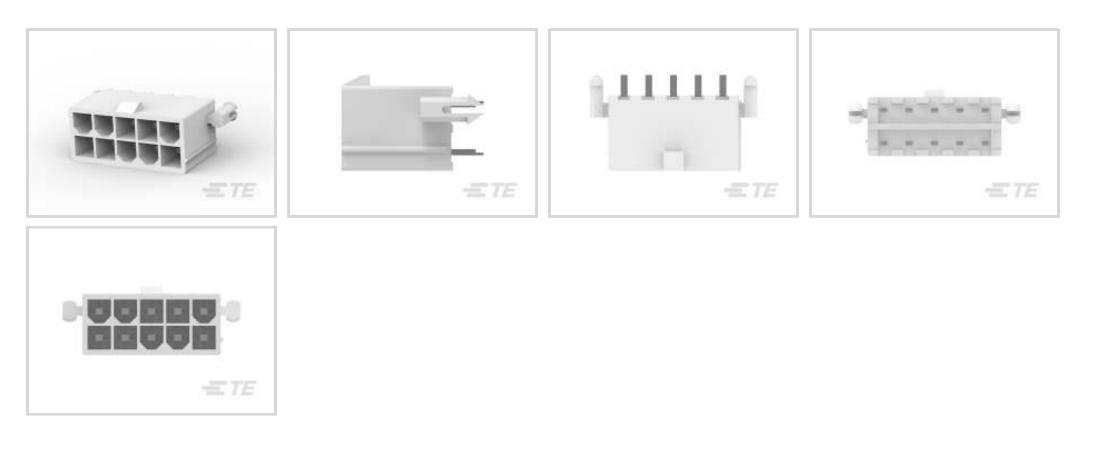


### VAL-U-LOK

TE Internal #: 1-1586039-0 Rectangular Power Connectors, Header, Plug, Wire-to-Board, 10 Position, 4.2 mm [.165 in] Centerline, Printed Circuit Board, UL 94V-2 View on TE.com >



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: 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

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 10 Position, 4.2 mm [. 165 in] Centerline, Printed Circuit Board, UL 94V-2



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
Contact Mating Area Plating Material Thickness	2.03 μm[80 μin]
Termination Features	
Termination Post & Tail Length	3.6 mm[.138 in]
Termination Method to Printed Circuit Board	Through Hole - Solder
Mechanical Attachment	
Mating Alignment Type	Keyed
Mating Retention	With
Mating Alignment	With
PCB Mount Alignment	With
PCB Mount Retention	With
PCB Mount Retention Type	Boardlock
Mating Retention Type	Latch

Connector Mounting Type

Board Mount

5	

## Housing Features

Centerline (Pitch)	4.2 mm[.165 in]
Housing Color	Natural
Housing Material	PA 66
Dimensions	
Compatible Insulation Diameter (Max)	2.39 mm[2.39 in]
Connector Height	12.8 mm[.504 in]
PCB Thickness (Recommended)	.07 mm[1.78 in]
Product Width	9.75 mm[.384 in]
Product Length	22.2 mm[.874 in]
Compatible Insulation Diameter Range	1.2 – 3.1 mm[.047 – .122 in]
Row-to-Row Spacing	4.2 mm[.165 in]
Usage Conditions	
Operating Temperature Range	-40 – 105 °C[-40 – 221 °F]

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 10 Position, 4.2 mm [. 165 in] Centerline, Printed Circuit Board, UL 94V-2



## **Operation/Application**

Circuit Application	Power
Identification Marking	
Circuit Identification Feature	With
Industry Standards	
CSA Rating	208567
UL Rating	Recognized
Agency/Standard	CSA, UL
Approved Standards	UL E28476
UL Flammability Rating	UL 94V-2
Glow Wire Rating	Standard Part - Not Glow Wire
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 2023 (235) Candidate List Declared Against: JUNE 2023 (235) 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

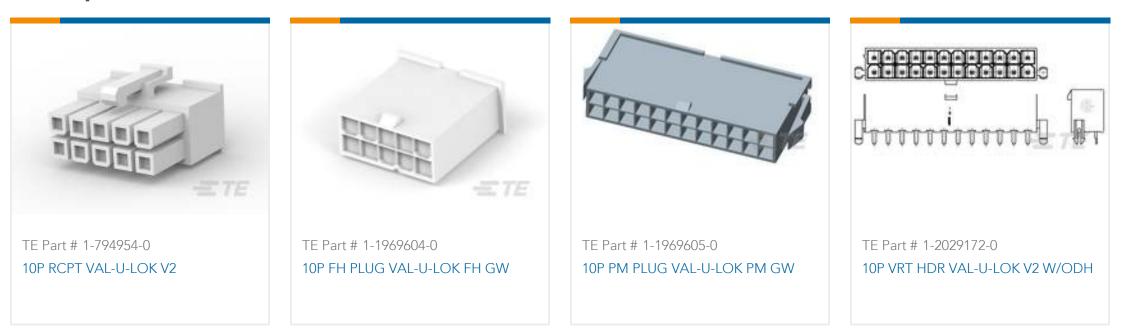
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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 to these limits for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits

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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-onreach

# **Compatible Parts**



# Customers Also Bought







## Documents

Product Drawings 10P VAL-U-LOK VRT HDR W/P V2

English

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 10 Position, 4.2 mm [. 165 in] Centerline, Printed Circuit Board, UL 94V-2



## CAD Files

## 3D PDF

English

Customer View Model

ENG\_CVM\_1-1586039-0\_B.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_1-1586039-0\_B.3d\_stp.zip

English

Customer View Model

ENG\_CVM\_1-1586039-0\_B.2d\_dxf.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** 

Application Specification

English

Agency Approvals UL Report

English