



VAL-U-LOK

TE Internal #: 2029059-6

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 6 Position, .165 in [4.2 mm] Centerline, Printed Circuit Board, UL 94V-0

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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: **6**

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	6
PCB Mount Orientation	Vertical
Number of Power Positions	6
Number of Signal Positions	0
Number of Rows	2

**Electrical Characteristics**

Operating Voltage	600 VAC
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**Contact Features**

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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

### 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	With
PCB Mount Retention	With
PCB Mount Retention Type	Boardlock
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 66 GF20

### Dimensions

Insulation Diameter (Max)	2.39 mm[2.39 in]
Row-to-Row Spacing	4.2 mm[.165 in]
PCB Thickness (Recommended)	.07 mm[1.78 in]
Width	9.75 mm[.383 in]
Accepts Wire Insulation Diameter Range	1.2 – 3.1 mm[.047 – .122 in]
Height	12.8 mm[.504 in]
Length	13.8 mm[.543 in]

### Usage Conditions

Operating Temperature Range	-40 – 105 °C[-40 – 221 °F]
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### Operation/Application

Circuit Application	Power
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### Identification Marking

Circuit Identification Feature	With
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### Industry Standards

UL Flammability Rating	UL 94V-0
Glow Wire Rating	GWT 750°C (Without Flame)
Agency/Standard Number	E28476
Agency/Standard	CSA, UL
UL Rating	Recognized
CSA File Number	208567
VDE Tested	No

### Packaging Features

Packaging Method	Box & Tray, Carton
Packaging Quantity	1

### 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	Not Yet Reviewed
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) Candidate List Declared Against: JAN 2019 (197) SVHC > Threshold: Not Yet Reviewed
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 # 1586861-6  
6P PM PLUG VAL-U-LOK PM GW



TE Part # 1586862-6  
6P FH PLUG VAL-U-LOK FH GW

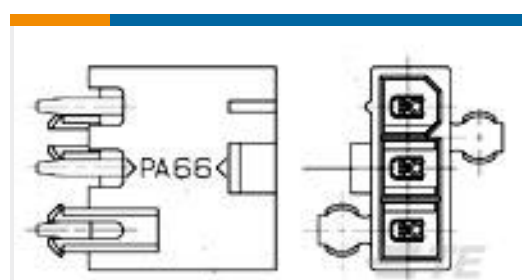


TE Part # 2296206-6  
6P FH PLUG VAL-U-LOK FH GW



TE Part # 2296207-6  
6P PM PLUG VAL-U-LOK PM GWT/V0

## Customers Also Bought



TE Part #2029181-4  
4P VAL-U-LOK VRTHDR W/PGS GW

## Documents

### Product Drawings

[6P VAL-U-LOK VRTHDR W/PGS GW](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_2029059-6\\_C.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2029059-6\\_C.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2029059-6\\_C.3d\\_stp.zip](#)

English

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### Datasheets & Catalog Pages

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

English

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### Product Specifications

[Application Specification](#)

English

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### Agency Approvals

[UL Report](#)

English