



VAL-U-LOK

TE Internal #: 1-1586038-2

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 12 Position, 4.2 mm [.165 in] Centerline, Printed Circuit Board, UL 94V-0

[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: **12**

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	12
PCB Mount Orientation	Vertical
Number of Power Positions	12
Number of Rows	2

**Electrical Characteristics**

Operating Voltage	600 VAC
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**Contact Features**

Contact Layout	Inline, Matrix
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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 $\mu$ m[80 $\mu$ in]

### 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 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	Natural
Housing Material	Nylon

### Dimensions

Compatible Insulation Diameter (Max)	2.39 mm[2.39 in]
Connector Height	12.8 mm[.504 in]
PCB Thickness (Recommended)	.06 mm[1.6 in]
Product Width	9.75 mm[.384 in]
Product Length	26.4 mm[1.039 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]
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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 Rating	Recognized
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Agency/Standard	UL
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Approved Standards	UL E28476
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UL Flammability Rating	UL 94V-0
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Glow Wire Rating	Standard Part - Not Glow Wire
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### Packaging Features

Packaging Quantity	225
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Packaging Method	Box & Tray, Tray
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### Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

EU RoHS Directive 2011/65/EU	Compliant
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EU ELV Directive 2000/53/EC	Out of Scope
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2023 (235) Candidate List Declared Against: JAN 2023 (233) Does not contain REACH SVHC
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Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
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Solder Process Capability	Wave solder capable to 265°C
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#### 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



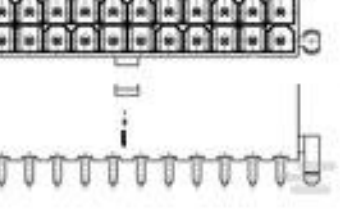
TE Part # 1-1586019-2  
12P RCPT VAL-U-LOK V0



TE Part # 1-1969613-2  
12P PM PLUG VAL-U-LOK V0



TE Part # 1-1969612-2  
12P FH PLUG VAL-U-LOK V0



TE Part # 1-2029172-2  
12P VRT HDR VAL-U-LOK V2 W/ODH

## Customers Also Bought



TE Part #4-1676966-7  
SMW2 8R2 5%



TE Part #3-1393239-0  
RT134024



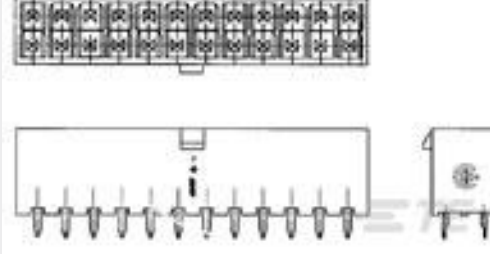
TE Part #215297-6  
6P HV100 REC CON. TE, 7.0MM



TE Part #826632-3  
3P AMPMODU II PIN HDR.



TE Part #1-640388-3  
13P MTA156 HDR ASSY RN STR F/L



TE Part #2-1586038-0  
20P VRT HDR VAL-U-LOK V0



TE Part #641992-3  
09P MTA156 HDR ASSY WO#2,4,6,8



TE Part #1-1393277-8  
V23076A3022C132

## Documents

### Product Drawings

12P VRT HDR VAL-U-LOK V0

English

### CAD Files

3D PDF

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_1-1586038-2\\_C.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1-1586038-2\\_C.3d\\_igs.zip](#)

English

Customer View Model



[ENG\\_CVM\\_CVM\\_1-1586038-2\\_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

### Product Environmental Compliance

[Product Compliance Document](#)

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[Product Compliance Document](#)

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### Agency Approvals

[UL Report](#)

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