



VAL-U-LOK

TE Internal #: 1-1586768-2
Rectangular Power Connectors, Header, Plug, Wire-to-Board, 12
Position, 4.2 mm [.165 in] Centerline, Printed Circuit Board, UL 94V-2
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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: **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 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 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 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	White
Housing Material	Polyamide

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[.383 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

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Circuit Application	Power
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Identification Marking

Circuit Identification Feature	With
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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	GWT 750°C (Without Flame)

Packaging Features

Packaging Quantity	225
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: JAN 2021 (211) 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 # 1-1586861-2
12P PM PLUG VAL-U-LOK PM GW

TE Part # 1-1586862-2
12P FH PLUG VAL-U-LOK FH GW

TE Part # 1-2296207-2
12P PM PLUG VAL-U-LOK PM GWT/V0

TE Part # 1-2296206-2
12P FH PLUG VAL-U-LOK FH GWT/V0

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

Customers Also Bought

TE Part #2029181-3
3P VAL-U-LOK VRTHDR W/PGS GW

TE Part #1586765-2
2P RCPT VAL-U-LOK GW

TE Part #794956-3
VAL-U-LOK SKT PHBZ SN 22-18AWG

TE Part #1586768-6
6P VERT HDR VAL-U-LOK GW

TE Part #1969591-4
HSG,REC,PANEL MOUNT,GWT,
SINGLE ROW,EP2.5

TE Part #1-2324245-0
ASSY,HDR,VERT,GWT,BOSSED,DUAL
ROW, EP2.5

TE Part #154805-E
SMCB 12 F AB VV 7-13 CL * H007 137
E002

TE Part #154806-E
SMCB 26 F AB VV 7-13 CL * H007 137
E002

Documents

Product Drawings
12P VERT HDR VAL-U-LOK GW
English



CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_1-1586768-2_B_c-1-1586768-2-b.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_1-1586768-2_B_c-1-1586768-2-b.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_1-1586768-2_B_c-1-1586768-2-b.3d_stp.zip

English

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Datasheets & Catalog Pages

VAL-U-LOK_GLOW_WIRE_CONNECTORS

English

Product Specifications

Application Specification

English

Instruction Sheets

Instruction Sheet (U.S.)

English

Agency Approvals

VDE Certificate

English