



VAL-U-LOK

TE Internal #: 2-2029265-0

PCB Mount Header, Vertical, Wire-to-Board, 20 Position, 4.2 mm [.165 in] Centerline, Fully Shrouded, Tin, Through Hole - Solder, Power, Natural, Tray

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

Connector System: **Wire-to-Board**

Number of Positions: **20**

Number of Rows: **2**

Features

Electrical Characteristics

Operating Voltage	600 VAC
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Dimensions

Row-to-Row Spacing	4.2 mm[.165 in]
Connector Width	9.75 mm[.384 in]
PCB Thickness (Recommended)	1.78 mm[.07 in]
Connector Height	12.8 mm[.504 in]
Connector Length	43.2 mm[1.69 in]

Packaging Features

Packaging Quantity	120
Packaging Method	Tray

Industry Standards

Compatible With Agency/Standards Products	UL, CSA
UL Rating	Recognized
Compatible With Approved Standards Products	UL E28476



Glow Wire Rating	GWT 750°C (Without Flame)
UL Flammability Rating	UL 94V-0

Usage Conditions

Operating Temperature (Max)	105 °C[221 °F]
Operating Temperature Range	-40 – 105 °C[-40 – 221 °F]

Mechanical Attachment

Mating Retention Type	Locking Tab
Mating Retention	With
Mating Alignment Type	Keyed
PCB Mount Retention Type	Boardlock
PCB Mount Retention	With
PCB Mount Alignment	Without
Connector Mounting Type	Board Mount
Mating Alignment	With

Termination Features

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

Contact Features

Contact Layout	Matrix
Contact Base Material	Brass
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Tin
Contact Type	Tab
Contact Current Rating (Max)	9 A

Housing Features

Housing Material	Polyamide
Centerline (Pitch)	4.2 mm[.165 in]

Configuration Features

Number of Loaded Positions	20
Number of Power Positions	20
PCB Mount Orientation	Vertical
Number of Positions	20



Number of Rows	2
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Product Type Features

Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Header
Connector System	Wire-to-Board
Header Type	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Body Features

Primary Product Color	Natural
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Operation/Application

Circuit Application	Power
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Other

EU RoHS Compliance	Compliant
EU ELV Compliance	Compliant

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) Candidate List Declared Against: JAN 2023 (233) 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 # 2-1586862-0  
20P FH PLUG VAL-U-LOK FH GW

TE Part # 2-2296207-0  
20P PM PLUG VAL-U-LOK PM GWT/V0

TE Part # 2-2296206-0  
20P FH PLUG VAL-U-LOK FH GWT/V0

TE Part # 2-1586861-0  
20P PM PLUG VAL-U-LOK PM GW

Customers Also Bought

TE Part #DT04-2P  
REC, 2P, GRY, N

TE Part #DT06-2S  
PLG, 2P, GRY, N

TE Part #CAT-D487-W416  
Wedgelocks: DEUTSCH DT

TE Part #CAT-D48-ST273  
DEUTSCH Solid Contacts

TE Part #CAT-AM71-CH8172  
AMP SUPERSEAL 1.5MM,  
CONNECTOR HOUSING

TE Part #281934-2  
SINGLE WIRE SEAL

TE Part #114017-ZZ  
SEALING PLUG, SIZE 12/16, WHT

Documents

Product Drawings

20P VAL-U-LOK VRTHDR W/PGS GW

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_2-2029265-0\_D\_c-2-2029265-0-d.2d\_dxf.zip

English



Customer View Model

[ENG\\_CVM\\_CVM\\_2-2029265-0\\_D\\_c-2-2029265-0-d.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_2-2029265-0\\_D\\_c-2-2029265-0-d.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