



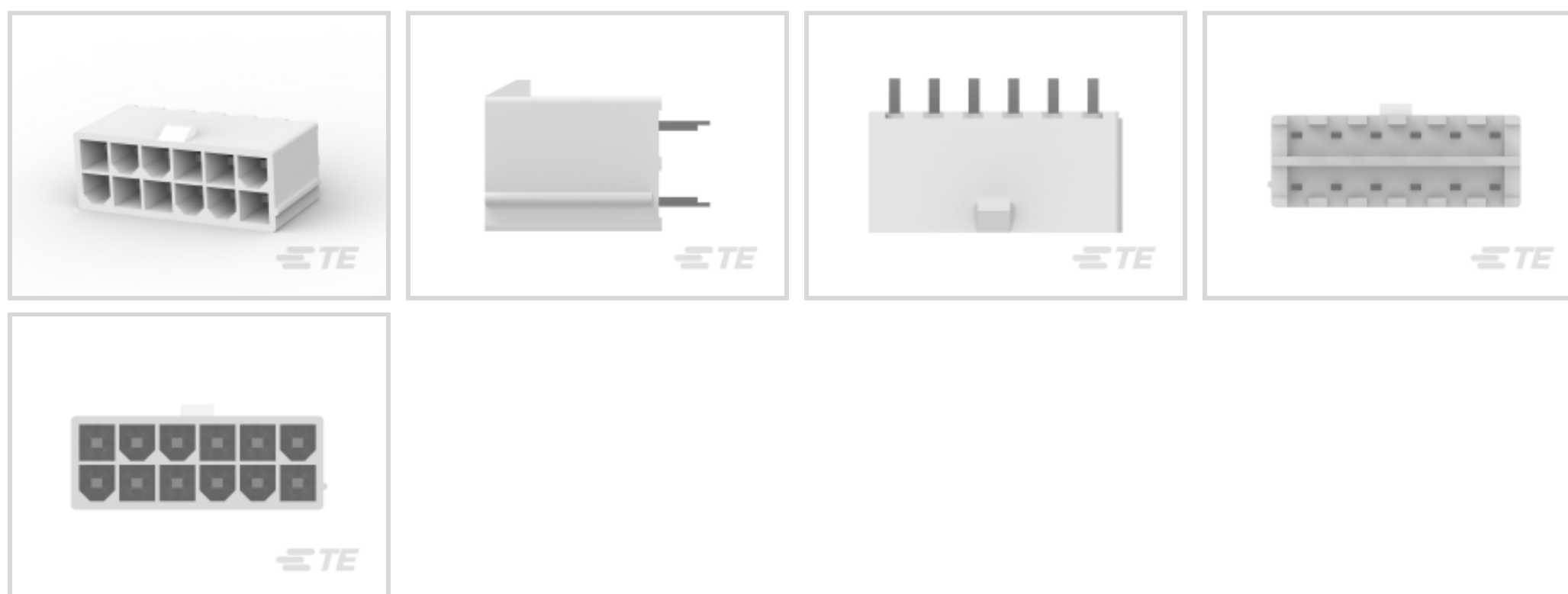
VAL-U-LOK

TE Internal #: 1-1586037-2

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 12 Position, .165 in [4.2 mm] 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: **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 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
Contact Mating Area Plating Material Thickness	2.03 μ m[80 μ 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 Alignment	With
PCB Mount Alignment	Without
PCB Mount Retention	Without
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

Dimensions

Insulation Diameter (Max)	2.39 mm[2.39 in]
Row-to-Row Spacing	4.2 mm[.165 in]
PCB Thickness (Recommended)	.06 mm[1.6 in]
Width	9.75 mm[.384 in]
Accepts Wire Insulation Diameter Range	1.2 – 3.1 mm[.047 – .122 in]
Height	12.8 mm[.504 in]
Length	26.4 mm[1.039 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-2
Glow Wire Rating	Standard Part - Not Glow Wire
Agency/Standard Number	E28476
Agency/Standard	CSA, UL
UL Rating	Recognized
CSA File Number	208567
VDE Tested	No

Packaging Features

Packaging Method	Box & Tray, Tray
Packaging Quantity	255

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	Out of Scope
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: JAN 2022 (223) Candidate List Declared Against: JUL 2021 (219) 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>

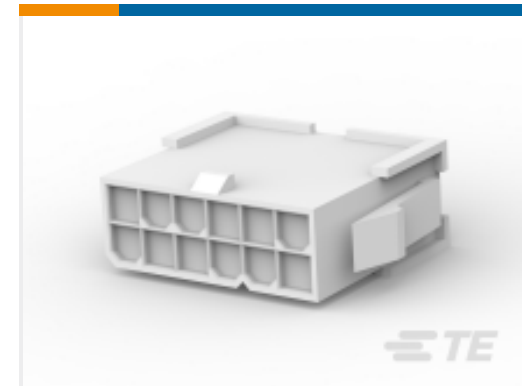
Compatible Parts



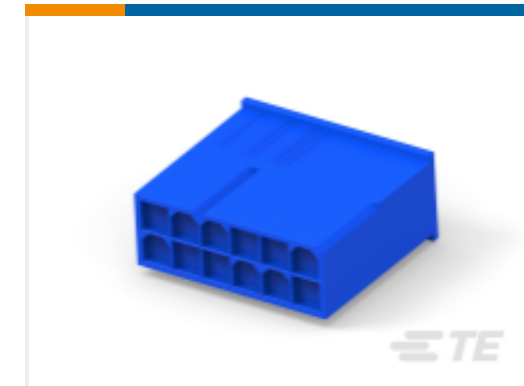
TE Part # 1-794954-2
12P RCPT VAL-U-LOK V2



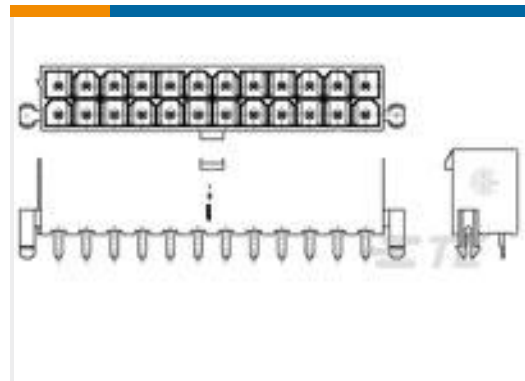
TE Part # 1-1969598-2
12P FH PLUG VAL-U-LOK V2



TE Part # 1-1969599-2
12P PM PLUG VAL-U-LOK V2



TE Part # 1-2029096-2
12P PLUG VAL-U-LOK V2 FH BLUE

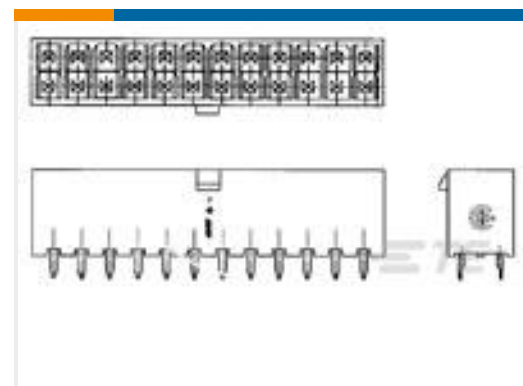


TE Part # 1-2029172-2
12P VRT HDR VAL-U-LOK V2 W/ODH

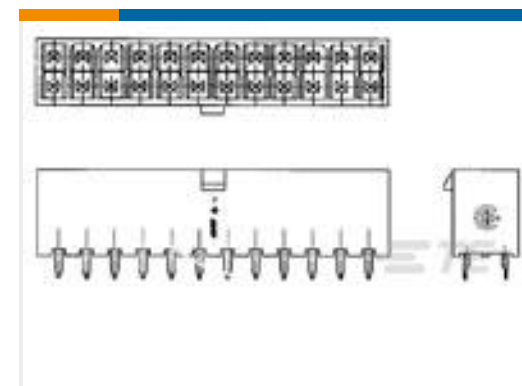
Customers Also Bought



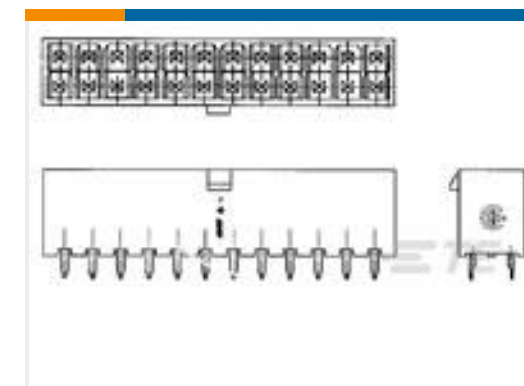
TE Part #2-1415899-5
RZH3-1C4-D012



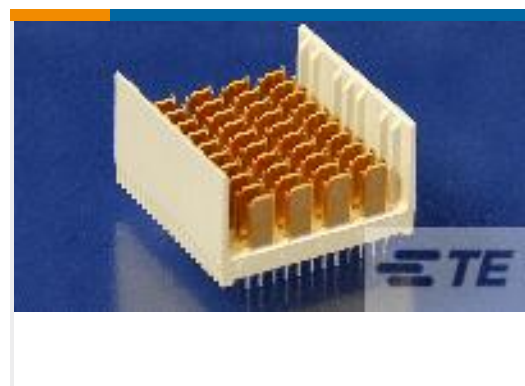
TE Part #2-1586037-0
20P VERT HDR VAL-U-LOK V2



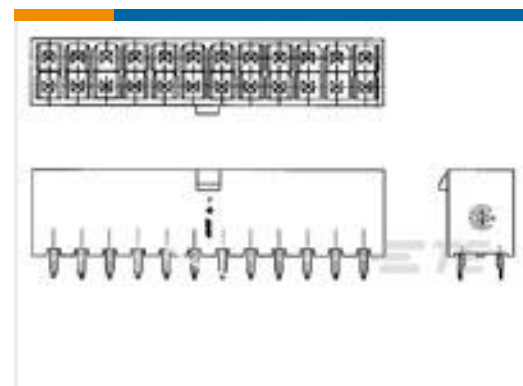
TE Part #1586037-6
6P VERT HDR VAL-U-LOK V2



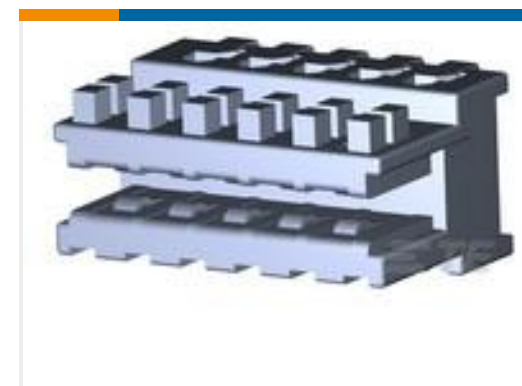
TE Part #1586037-2
2P VERT HDR VAL-U-LOK V2



TE Part #6469074-1
HM-ZD 4PR HDR ASSY 1.8MM



TE Part #1586037-4
4P VERT HDR VAL-U-LOK V2



TE Part #284930-5
DUOPLUG Standard, female conn.



TE Part #2-284932-4
DUOPLUG MKI STD,KEYED 3/4,4 POS, BLACK



Documents

Product Drawings

12P VERT HDR VAL-U-LOK V2

English

CAD Files

3D PDF

English

Customer View Model

[ENG_CVM_1-1586037-2_B.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_1-1586037-2_B.3d_stp.zip](#)

English

Customer View Model

[ENG_CVM_1-1586037-2_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

Product Environmental Compliance

MD_1-1586037-2_01272017752_dmtec

English

MD_1-1586037-2_01272017752_dmtec

English

Agency Approvals

UL Report

English