

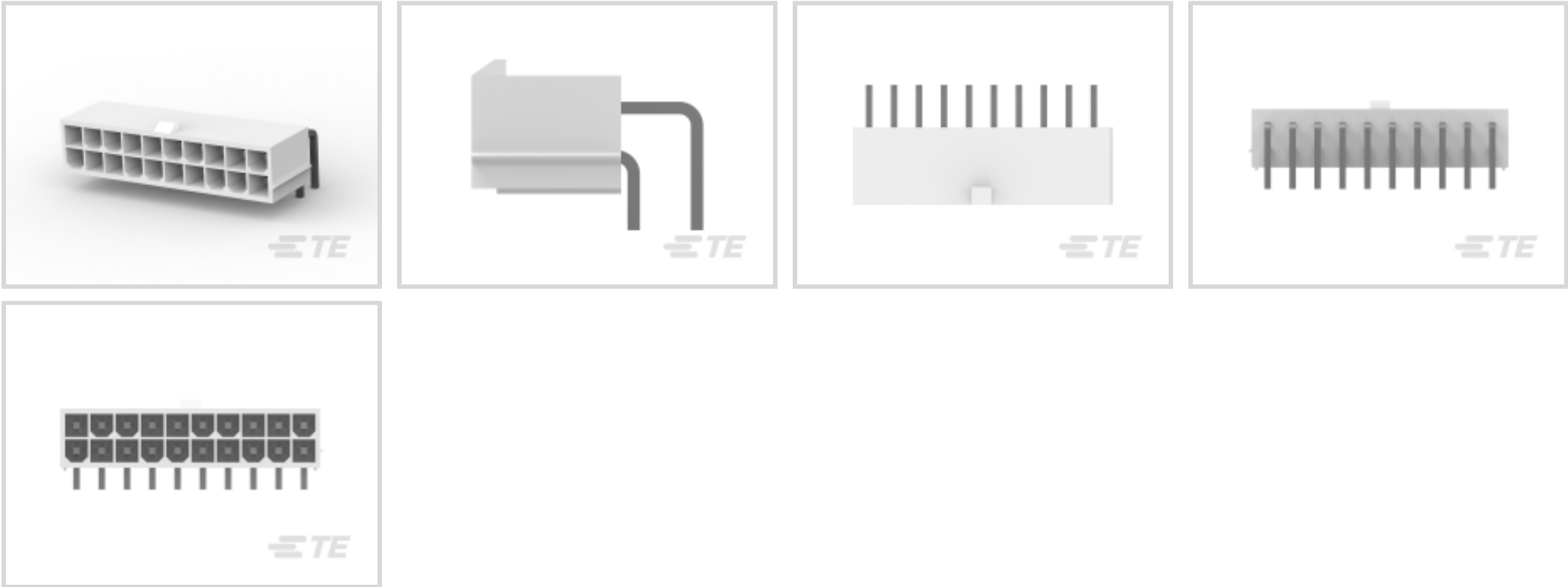


VAL-U-LOK

TE Internal #: 2-1586041-0  
PCB Mount Header, Right Angle, Wire-to-Board, 20 Position, 4.2 mm [.165 in] Centerline, Fully Shrouded, Tin (Sn), Through Hole - Solder, Power

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**  
PCB Mount Orientation: **Right Angle**  
Connector System: **Wire-to-Board**  
Number of Positions: **20**  
Number of Rows: **2**

Features

Product Type Features

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

Configuration Features

Number of Loaded Positions	20
Number of Power Positions	20
PCB Mount Orientation	Right Angle
Number of Positions	20
Number of Rows	2

Electrical Characteristics



Operating Voltage	600 VAC
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Body Features

Primary Product Color	Natural
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Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	.381 µm[15 µin]
Contact Size	1.14mm
Contact Mating Area Plating Material Thickness	2.032 µm[80 µin]
PCB Contact Termination Area Plating Material Thickness	2.032 µm[80 µin]
Contact Shape & Form	Square
Contact Layout	Matrix
Contact Base Material	Brass
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Tin (Sn)
Contact Type	Tab
Contact Current Rating (Max)	9 A

Termination Features

Termination Post & Tail Length	3.6 mm[.141 in]
Square Termination Post & Tail Dimension	1.14 mm[.045 in]
Termination Method to PCB	Through Hole - Solder

Mechanical Attachment

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

Housing Features

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

Dimensions

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Row-to-Row Spacing	4.2 mm[.165 in]
Connector Width	13 mm[.51 in]
PCB Thickness (Recommended)	1.6 mm[.063 in]
Connector Height	9.8 mm[.386 in]
Connector Length	43.2 mm[1.7 in]

Usage Conditions

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

Operation/Application

Circuit Application	Power
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Industry Standards

Compatible With Agency/Standards Products	CSA, UL
UL Rating	Recognized
Compatible With Approved Standards Products	UL E28476
Glow Wire Rating	Standard Part - Not Glow Wire
UL Flammability Rating	UL 94V-2

Packaging Features

Packaging Quantity	90
Packaging Method	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	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 2025 (247) Candidate List Declared Against: JAN 2025 (247) 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

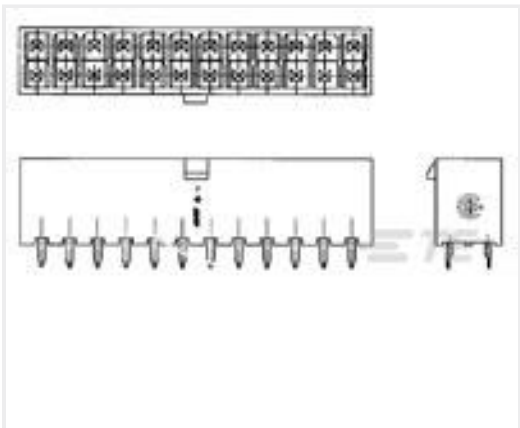


TE Part # 2-1969598-0  
20P FH PLUG VAL-U-LOK V2

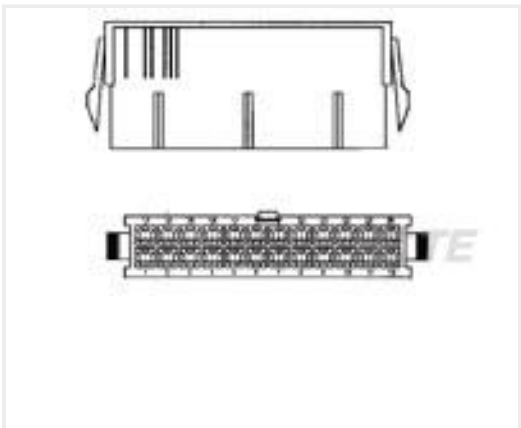


TE Part # 2-794954-0  
20P RCPT VAL-U-LOK V2


Customers Also Bought




TE Part #1-1586037-0  
10P VERT HDR VAL-U-LOK V2



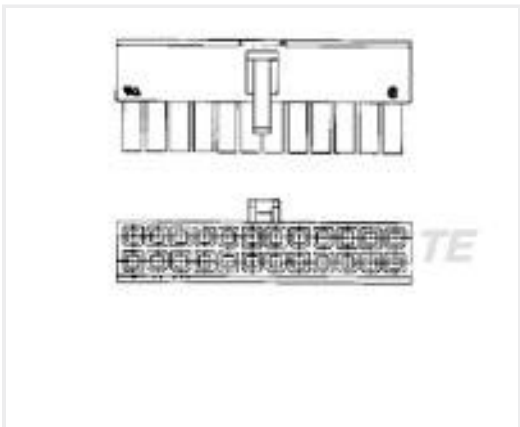
TE Part #794953-6  
6P PM PLUG VAL-U-LOK V2



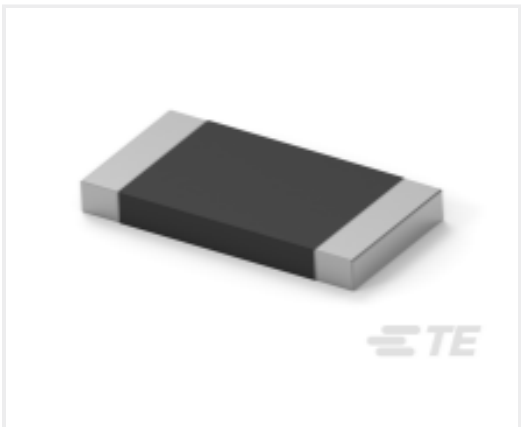
TE Part #794955-4  
VAL-U-LOK PIN PHBZ AU 22-18AWG



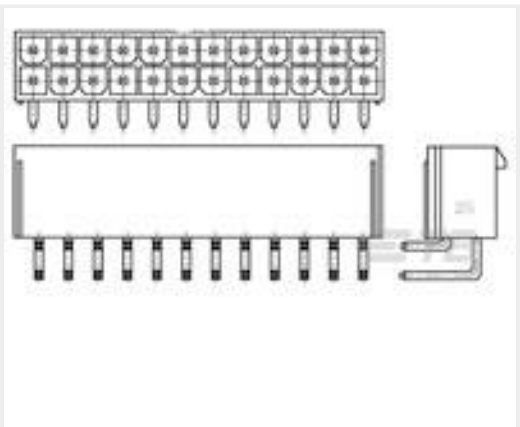
TE Part #1586055-3  
VAL-U-LOK SKT PHBZ SN 16AWG



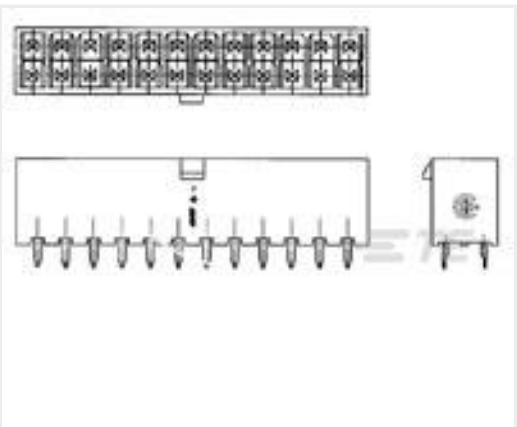
TE Part #2-1586019-0  
20P RCPT VAL-U-LOK V0



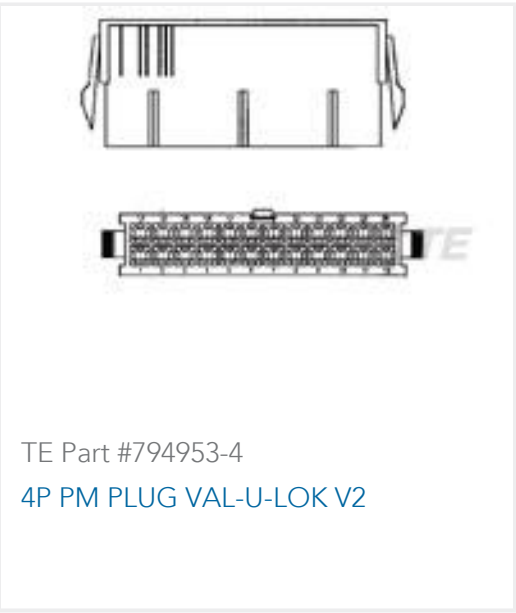
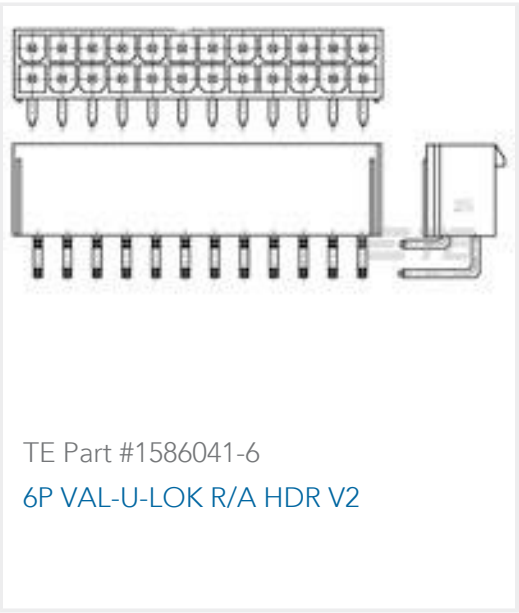
TE Part #9-2176421-5  
TLRP 2512 2.0W R120 1% 75PPM 4K RL



TE Part #1586041-2  
2P VAL-U-LOK R/A HDR V2



TE Part #1586038-4  
4P VRT HDR VAL-U-LOK V0



Documents

Product Drawings

20P VAL-U-LOK R/A HDR V2

English

CAD Files

Customer View Model

ENG\_CVM\_2-1586041-0\_B.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_2-1586041-0\_B.3d\_stp.zip

English

Customer View Model

ENG\_CVM\_2-1586041-0\_B.2d\_dxf.zip

English

3D PDF

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

Agency Approvals

UL Report

English

UL Report

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