

2-1586041-0 ✓ ACTIVE



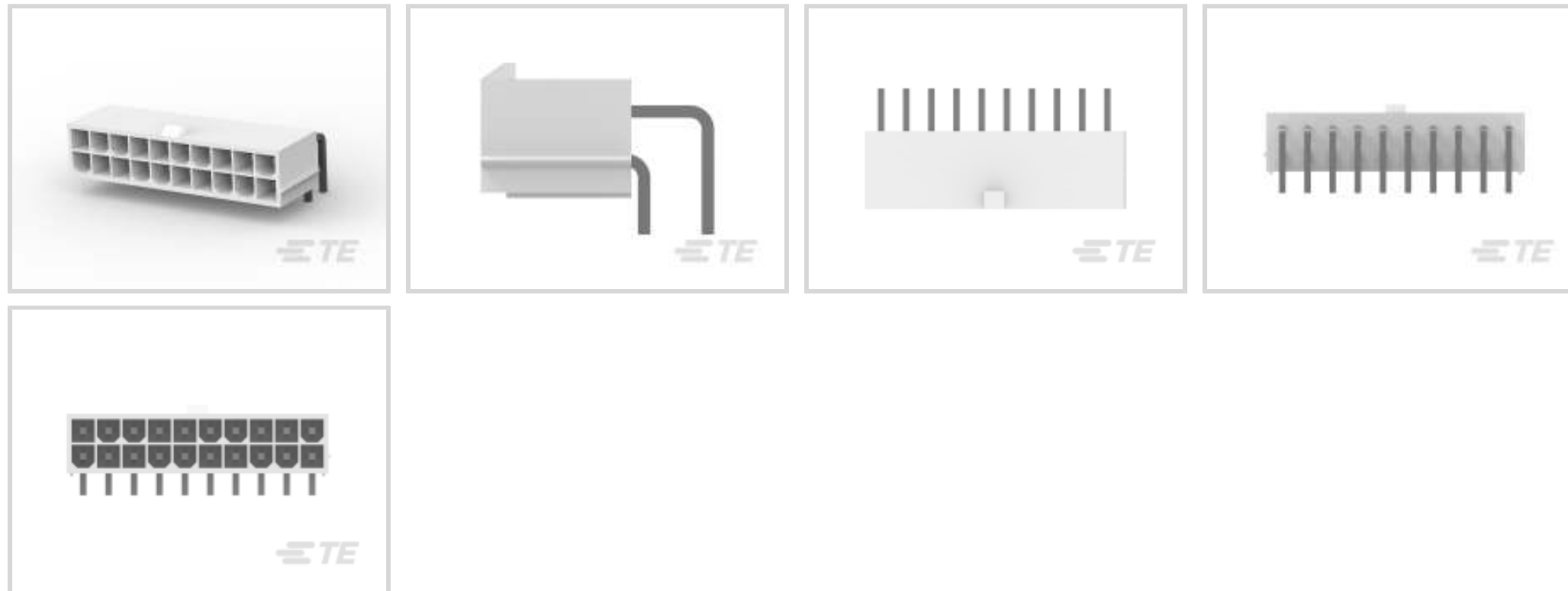
## VAL-U-LOK

TE Internal #: 2-1586041-0

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 20  
Position, 4.2 mm [.165 in] 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: **20**

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	20
PCB Mount Orientation	Right Angle
Number of Power Positions	20
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	3.6 mm[.14 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	9.8 mm[.39 in]
PCB Thickness (Recommended)	.06 mm[1.6 in]
Product Width	13 mm[.51 in]
Product Length	43.2 mm[1.7 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

CSA Rating	208567
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UL Rating	Recognized
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Agency/Standard	CSA, UL
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Approved Standards	UL E28476
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UL Flammability Rating	UL 94V-2
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Glow Wire Rating	Standard Part - Not Glow Wire
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### Packaging Features

Packaging Quantity	90
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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	Compliant
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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

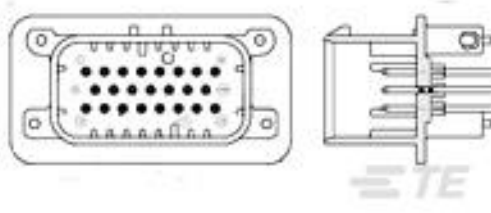


TE Part # 2-794954-0  
20P RCPT VAL-U-LOK V2

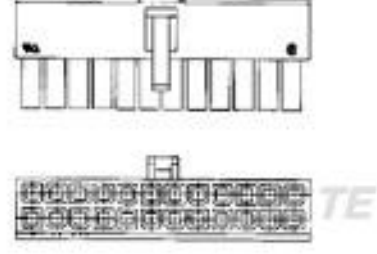


TE Part # 2-1969598-0  
20P FH PLUG VAL-U-LOK V2


## Customers Also Bought



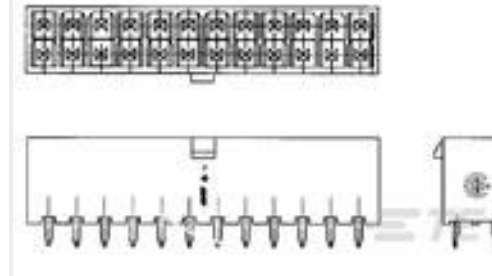
TE Part #1-776228-1  
23POS,PIN DIA 1.3,HDR ASSY,  
180DEG,COD 1



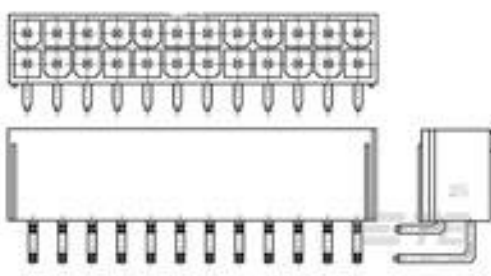
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20P RCPT VAL-U-LOK V2



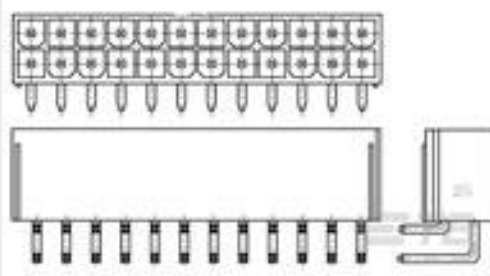
TE Part #794955-1  
VAL-U-LOK PIN BR SN 22-18AWG



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



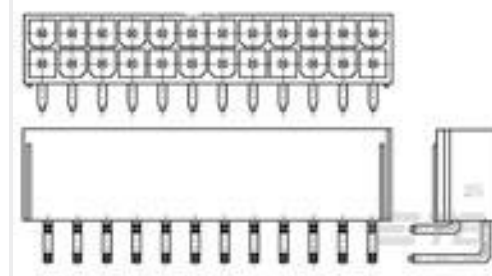
TE Part #1586041-2  
2P VAL-U-LOK R/A HDR V2



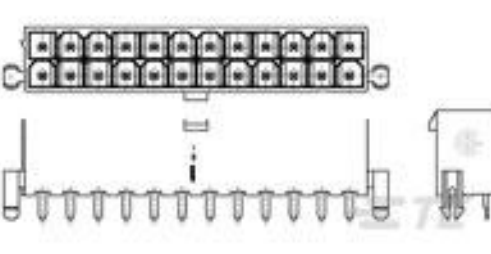
TE Part #1586041-4  
4P VAL-U-LOK R/A HDR V2



TE Part #35111  
TERMINAL,PIDG R 12-10 5/16



TE Part #1-1586041-6  
16P VAL-U-LOK R/A HDR V2



TE Part #2-1586039-0  
20P VAL-U-LOK VRT HDR W/P V2

## 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