

1-770178-1 ✓ ACTIVE

MATE-N-LOK | Mini-Universal MATE-N-LOK

TE Internal #: 1-770178-1

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 6 Position, .162 in [4.14 mm] Centerline, Mini-Universal MATE-N-LOK

[View on TE.com >](#)



Connectors > Power Connectors > Rectangular Power > Rectangular Power Connectors



Rectangular Power Connector Type: **Header**

Connector & Housing Type: **Receptacle**

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

Number of Positions: **6**

Centerline (Pitch): **4.14 mm [ .162 in ]**

## Features

### Product Type Features

Header Type	Fully Shrouded
Rectangular Power Connector Type	Header
Connector & Housing Type	Receptacle
Connector System	Wire-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

Number of Positions	6
PCB Mount Orientation	Vertical
Number of Power Positions	6
Number of Signal Positions	0
Number of Rows	2

### Electrical Characteristics

Operating Voltage	600 VDC
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### Contact Features

Multiple Contact Types	Without
Contact Current Rating (Max)	9.5 A
Contact Retention Within Housing	Without
Contact Type	Pin
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	.76 $\mu\text{m}$ [30 $\mu\text{in}$ ]
Contact Termination Area Plating Thickness	3.81 $\mu\text{m}$ [150 $\mu\text{in}$ ]

### Termination Features

Termination Post & Tail Length	3.69 mm[.145 in]
Termination Method to Printed Circuit Board	Through Hole - Solder

### Mechanical Attachment

Strain Relief	Without
Mating Alignment Type	Chamfered Edges
Mating Alignment	With
PCB Mount Alignment	Without
Panel Mount Feature	Without
PCB Mount Retention	With
PCB Mount Retention Type	Boardlock
Connector Mounting Type	Board Mount
Mating Retention	With
Mating Retention Type	Locking Tab

### Housing Features

Centerline (Pitch)	4.14 mm[.162 in]
Housing Color	White
Housing Material	Nylon
Boardlock Material	Nylon

### Dimensions

Insulation Diameter (Max)	3.2 mm[3.2 in]
Row-to-Row Spacing	4.14 mm[.162 in]
Width	9.83 mm



PCB Thickness (Recommended)	.06 mm[1.57 in]
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Height	13.49 mm
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Length	13.97 mm
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### Usage Conditions

Operating Temperature Range	-55 – 105 °C[-67 – 221 °F]
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### Operation/Application

Assembly Integration Feature	Without
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Circuit Application	Power
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### Industry Standards

CSA Rating	Certified
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UL Flammability Rating	UL 94V-0
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Glow Wire Rating	Standard Part - Not Glow Wire
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Agency/Standard Number	E28476
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Agency/Standard	CSA, UL
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UL Rating	Recognized
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CSA File Number	LR7189
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VDE Tested	No
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### Packaging Features

Packaging Method	Bag
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Packaging Quantity	200
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### Other

For Use With	Plug Housing
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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 2022 (224) Candidate List Declared Against: JAN 2022 (223) SVHC > Threshold: Not Yet Reviewed
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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 # 794190-1  
06P MINI UMNL2 PLUG HSG UL94V0




TE Part # 172168-1  
6 CIR UNIV M-N-L PLUG




TE Part # 2029060-1  
MINI UMNL LATCH LOCK

## Also in the Series | Mini-Universal MATE-N-LOK




Connector Contacts(11)



Insertion & Extraction Tools(1)




PCB Headers & Receptacles(1)




Power Contacts(85)




Rectangular Backshells & Clamps(2)



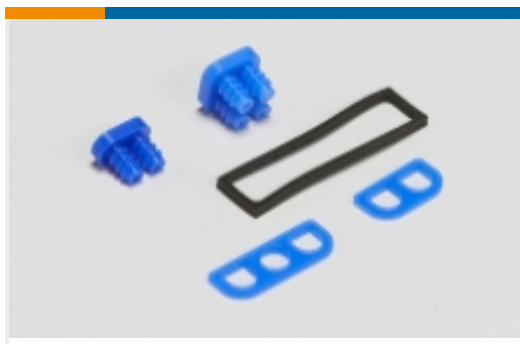
Rectangular Boots & Strain Relief(2)



Rectangular Connector Keying Plugs(2)



Rectangular Connector Locking(2)

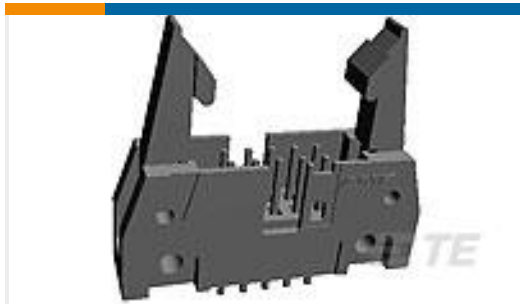


Rectangular Connector Seals(20)



Rectangular Power Connectors(283)

## Customers Also Bought



TE Part #5499374-1  
A/L UNIV HDR 10P VERT SHT LAT



TE Part #1-794066-1  
12P MINI UMNL HDR W/DH AU LF



TE Part #1-794067-1  
14P MINI UMNL HDR W/DH AU



TE Part #1-770186-1  
12P MINI UMNL ASSY VO SNAU LF



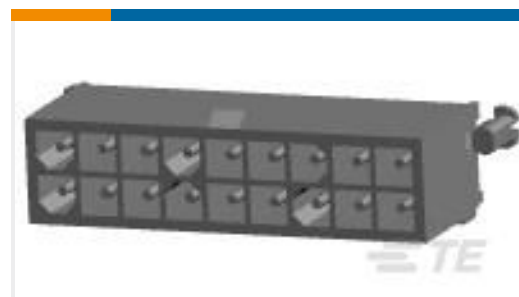
TE Part #1-794065-1  
08P MINI UMNL HDR W/DH AU LF



TE Part #1-794068-1  
16P MINI UMNL HDR W/DH AU LF



TE Part #1-1903328-2  
DYNAMIC 4200S HDR ASSY H 2P X



TE Part #1-794069-1  
18P MINI UMNL HDR W/DH AU LF



TE Part #3-794619-6  
06P MICRO MNL ASSY,R/A,HDR LF



TE Part #4-1579008-9  
EXTRACTION TOOL

## Documents

### Product Drawings

[06P MINI UMNL ASSY VO SNAU LF](#)

English

### CAD Files

[3D PDF](#)

[3D](#)

[Customer View Model](#)

[ENG\\_CVM\\_CVM\\_1-770178-1\\_N.2d\\_dxf.zip](#)





English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_1-770178-1\\_N.3d\\_igs.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_1-770178-1\\_N.3d\\_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

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**Datasheets & Catalog Pages**

[SOFT\\_SHELL\\_PIN\\_AND\\_SOCKET\\_CONNECTORS\\_CATALOG](#)

English

[1-1773458-0\\_MINI\\_UNIVERSAL\\_MATE\\_N\\_LOK\\_CONNECTOR\\_SYSTEM\\_QRG](#)

English

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**Product Specifications**

[Application Specification](#)

English

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**Product Environmental Compliance**

[MD\\_1-770178-1\\_03212019615\\_dmtec](#)

English

[MD\\_1-770178-1\\_03212019615\\_dmtec](#)

English

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**Instruction Sheets**

[Instruction Sheet \(U.S.\)](#)

English

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**Agency Approvals**

[UL](#)

English