

1-770170-1 ✓ ACTIVE

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

TE Internal #: 1-770170-1

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 3 Position, 4.14 mm [.162 in] Centerline, Mini-Universal MATE-N-LOK

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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: **3**

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 | 3 |
| PCB Mount Orientation | Vertical |
| Number of Power Positions | 3 |
| Number of Signal Positions | 0 |
| Number of Rows | 1 |

Electrical Characteristics

| | |
|-------------------|---------|
| Operating Voltage | 600 VDC |
|-------------------|---------|



Contact Features

| | |
|---|--|
| Multiple Contact Types | Without |
| PCB Contact Termination Area Plating Material Thickness | 3.81 μm [150 μin] |
| Contact Layout | Inline |
| Contact Mating Area Plating Material | Gold |
| 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 Thickness | .76 μm [30 μin] |

Termination Features

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|---|-----------------------|
| 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 Retention | With |
| Mating Alignment | With |
| PCB Mount Alignment | Without |
| Panel Mount Feature | Without |
| PCB Mount Retention | With |
| PCB Mount Retention Type | Boardlock |
| Mating Retention Type | Locking Tab |
| Connector Mounting Type | Board Mount |

Housing Features

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

Dimensions

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|--------------------------------------|-----------------|
| Compatible Insulation Diameter (Max) | 3.2 mm[.126 in] |
| Connector Height | 6.35 mm |
| PCB Thickness (Recommended) | .06 mm[.002 in] |



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|---------------|----------|
| Product Width | 13.49 mm |
|---------------|----------|

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|----------------|----------|
| Product Length | 17.83 mm |
|----------------|----------|

Usage Conditions

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|-----------------------------|----------------------------|
| Operating Temperature Range | -55 – 105 °C[-67 – 221 °F] |
|-----------------------------|----------------------------|

Operation/Application

| | |
|---------------------|-------|
| Circuit Application | Power |
|---------------------|-------|

Industry Standards

| | |
|------------|--------------------|
| CSA Rating | Certified, LR 7189 |
|------------|--------------------|

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|-----------|------------|
| UL Rating | Recognized |
|-----------|------------|

| | |
|-----------------|---------|
| Agency/Standard | CSA, UL |
|-----------------|---------|

| | |
|--------------------|-----------|
| Approved Standards | UL E28476 |
|--------------------|-----------|

| | |
|------------------------|----------|
| UL Flammability Rating | UL 94V-0 |
|------------------------|----------|

| | |
|------------------|-------------------------------|
| Glow Wire Rating | Standard Part - Not Glow Wire |
|------------------|-------------------------------|

Packaging Features

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|--------------------|-----|
| Packaging Quantity | 200 |
|--------------------|-----|

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|------------------|-----|
| Packaging Method | Bag |
|------------------|-----|

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 2023 (235) Candidate List Declared Against: JUNE 2023 (235) 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 # 172166-1
3 CIR UNIV M-N-L PLUG




TE Part # 794186-1
03P MINI UMNL2 PLUG HSG UL94V0




TE Part # 2029060-1
MINI UMNL LATCH LOCK


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




Connector Backshells(2)




Connector Contacts(8)



Connector Seals & Cavity Plugs(17)



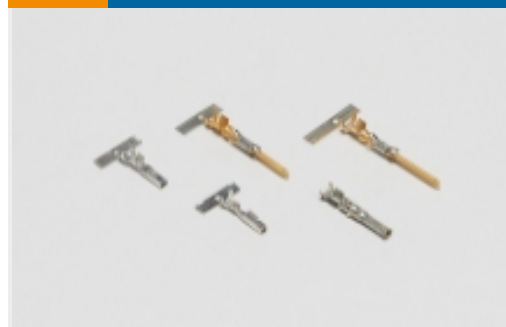
Connector Strain Relief(2)



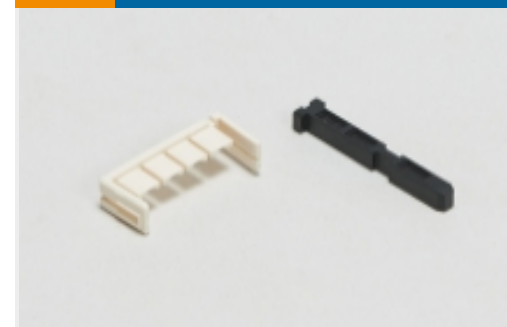
Insertion & Extraction Tools(1)




PCB Headers & Receptacles(1)



Power Contacts(84)



Rectangular Connector Keying Plugs(2)

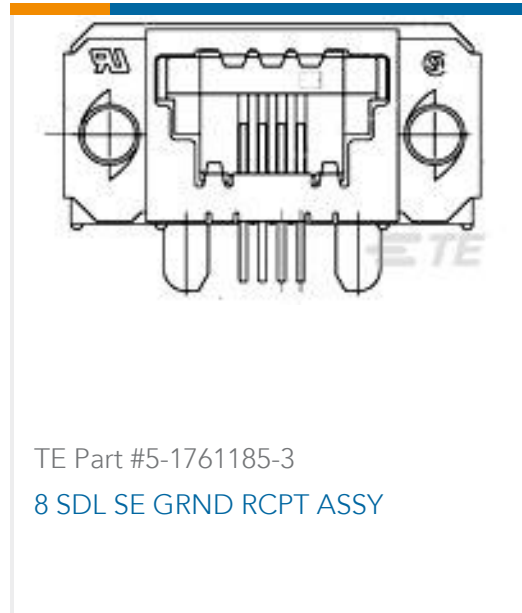


Rectangular Connector Locking(2)



Rectangular Power Connectors(244)

Customers Also Bought



TE Part #5-1761185-3
8 SDL SE GRND RCPT ASSY



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



TE Part #5535032-5
ASSY,RECEPTACLE,EUROCARD,TYPE C,LEAD-FRE



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 #3-1625868-6
RP 2A 0.25W 12R4 0.1% 25PPM 1K RL



TE Part #1123431-1
Signal Header



TE Part #1-1735042-4
1MM FFC SMT V ASSY 14P EMBOSS

Documents

Product Drawings

[03P MINI UMNL ASSY VO SNAU LF](#)

English

CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_1-770170-1_N.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770170-1_N.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770170-1_N.3d_stp.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



Product Compliance Document

English

Product Compliance Document

English

Instruction Sheets

Instruction Sheet (U.S.)

English

Agency Approvals

UL

English