

1-770170-0 ✓ ACTIVE

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

TE Internal #: 1-770170-0

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 3 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: **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

| | |
|--|---|
| Contact Layout | Inline |
| 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 | Tin |
| Contact Mating Area Plating Material Thickness | 3.81 – 8.89 μm [150 – 350 μin] |
| Contact Termination Area Plating Thickness | 3.81 μm [150 μin] |

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 |

Dimensions

| | |
|-----------------------------|-----------------|
| Insulation Diameter (Max) | 3.2 mm[.126 in] |
| Width | 13.49 mm |
| PCB Thickness (Recommended) | .06 mm[1.57 in] |



| | |
|--------|---------|
| Height | 6.35 mm |
|--------|---------|

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

Usage Conditions

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

Operation/Application

| | |
|------------------------------|---------|
| Assembly Integration Feature | Without |
|------------------------------|---------|

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

Industry Standards

| | |
|------------|-----------|
| CSA Rating | Certified |
|------------|-----------|

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

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

| | |
|------------------------|--------|
| Agency/Standard Number | E28476 |
|------------------------|--------|

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

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

| | |
|-----------------|--------|
| CSA File Number | LR7189 |
|-----------------|--------|

| | |
|------------|----|
| VDE Tested | No |
|------------|----|

Packaging Features

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

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

Other

| | |
|--------------|--------------|
| For Use With | Plug Housing |
|--------------|--------------|

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: JAN 2022 (223) Candidate List Declared Against: JAN 2022 (223) 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 Contacts(11)



Insertion & Extraction Tools(1)




PCB Headers & Receptacles(1)




Power Contacts(85)




Rectangular Backshells & Clamps(2)



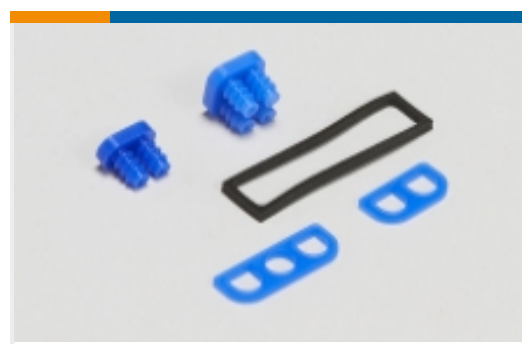
Rectangular Boots & Strain Relief(2)



Rectangular Connector Keying Plugs(2)



Rectangular Connector Locking(2)

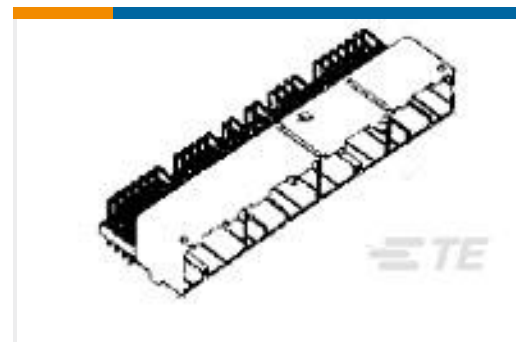
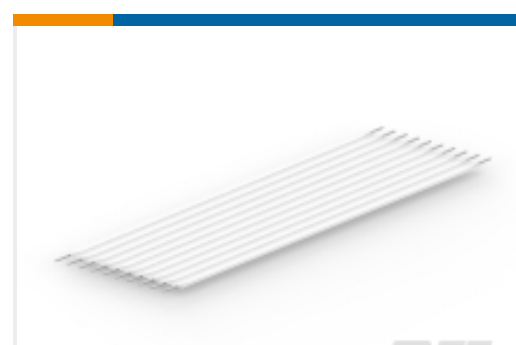
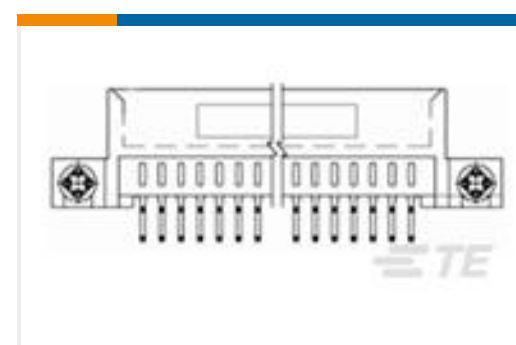
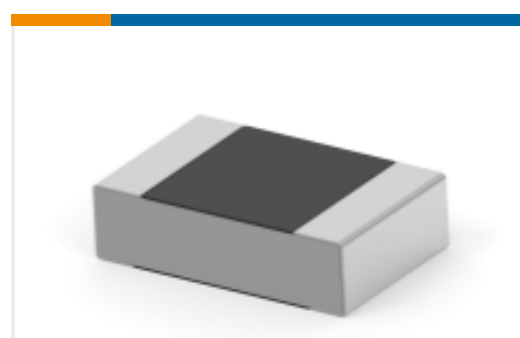


Rectangular Connector Seals(20)



Rectangular Power Connectors(283)

Customers Also Bought

TE Part #1-770182-0
09P MINI-UMNL ASSY VO SNNITE Part #3-2176338-5
CRGCQ 0402 470K 5%TE Part #1-1376430-8
025/040 135POS CAP ASSY H TINTE Part #1-794066-0
12P MINI UMNL HDR W/DH SN LFTE Part #3-794679-6
06P MICRO MNL ASSY,R/A,THRU,LFTE Part #2-640383-0
20P MTA156 HDR ASSY STR SQ SNTE Part #3-1474644-1
FSN-23A-16TE Part #5645384-6
CONNECTOR ASSEMBLY, STD EDGE
|TE Part #63660-1
MAG-MATE POST 22-20 016TPCUBRTE Part #2176238-4
CPF A 0805 15R 0.1% 25PPM 5K RL

Documents

Product Drawings

03P MINI-UMNL ASSY VO SNNI*

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_1-770170-0_N.2d_dxf.zip



English

Customer View Model

[ENG_CVM_CVM_1-770170-0_N.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770170-0_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

[1-1773458-0_MINI_UNIVERSAL_MATE_N_LOK_CONNECTOR_SYSTEM_QRG](#)

English

Product Specifications

[Application Specification](#)

English

Product Environmental Compliance

[TE Material Declaration](#)

English

[MD_1-770170-0_02092018516_dmtec](#)

English

[MD_1-770170-0_02092018516_dmtec](#)

English

Instruction Sheets

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

English

Agency Approvals

[UL](#)

English