

WIN*SOURCE*
ELECTRONICS

THE DATASHEET OF
1-770969-0



1-770969-0 ✓ ACTIVE

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

TE Internal #: 1-770969-0

PCB Mount Header, Right Angle, Wire-to-Board, 6 Position, 4.14 mm [.162 in] Centerline, Fully Shrouded, Tin, Mini-Universal MATE-N-LOK

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Header**

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

Number of Positions: **6**

Number of Rows: **2**

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

Features

Product Type Features

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

Configuration Features

| | |
|----------------------------------|--------------|
| Number of Power Positions | 6 |
| Number of Columns | 3 |
| Number of Loaded Positions | 6 |
| Connector Contact Load Condition | Fully Loaded |
| Number of Positions | 6 |
| Number of Rows | 2 |



| | |
|-----------------------|-------------|
| PCB Mount Orientation | Right Angle |
|-----------------------|-------------|

Electrical Characteristics

| | |
|-------------------|---------|
| Operating Voltage | 600 VAC |
|-------------------|---------|

Body Features

| | |
|-----------------------|-------|
| Primary Product Color | White |
|-----------------------|-------|

Contact Features

| | |
|--------------|-----|
| Contact Size | 1mm |
|--------------|-----|

| | |
|---------------------------------------------------------|-------------------------------------------------------|
| PCB Contact Termination Area Plating Material Thickness | 3.81 – 8.89 μm [150 – 350 μin] |
|---------------------------------------------------------|-------------------------------------------------------|

| | |
|----------------|--------|
| Contact Layout | Matrix |
|----------------|--------|

| | |
|---------------------|---------------|
| Mating Pin Diameter | 1 mm[.039 in] |
|---------------------|---------------|

| | |
|-----------------------------------------|-----------------------------------------|
| Contact Underplating Material Thickness | 1.27 μm [50 μin] |
|-----------------------------------------|-----------------------------------------|

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

| | |
|------------------------------------------------------|-------|
| PCB Contact Termination Area Plating Material Finish | Matte |
|------------------------------------------------------|-------|

| | |
|----------------------|-------|
| Contact Shape & Form | Round |
|----------------------|-------|

| | |
|---------------------------------------------|-------|
| Contact Mating Area Plating Material Finish | Matte |
|---------------------------------------------|-------|

| | |
|-------------------------------|--------|
| Contact Underplating Material | Nickel |
|-------------------------------|--------|

| | |
|-----------------------------------------------|-----|
| PCB Contact Termination Area Plating Material | Tin |
|-----------------------------------------------|-----|

| | |
|-----------------------|-------|
| Contact Base Material | Brass |
|-----------------------|-------|

| | |
|--------------------------------------|-----|
| Contact Mating Area Plating Material | Tin |
|--------------------------------------|-----|

| | |
|--------------|-----|
| Contact Type | Pin |
|--------------|-----|

| | |
|------------------------------|-------|
| Contact Current Rating (Max) | 9.5 A |
|------------------------------|-------|

Termination Features

| | |
|----------------------------------|---------------|
| Termination Post & Tail Diameter | 1 mm[.039 in] |
|----------------------------------|---------------|

| | |
|--------------------------------|------------------|
| Termination Post & Tail Length | 3.69 mm[.145 in] |
|--------------------------------|------------------|

| | |
|---------------------------|-----------------------|
| Termination Method to PCB | Through Hole - Solder |
|---------------------------|-----------------------|

Mechanical Attachment

| | |
|-----------------------|-----------------|
| Mating Alignment Type | Chamfered Edges |
|-----------------------|-----------------|

| | |
|------------------|------|
| Mating Retention | With |
|------------------|------|

| | |
|---------------------|---------|
| Panel Mount Feature | Without |
|---------------------|---------|

| | |
|--------------------------|-----------|
| PCB Mount Retention Type | Boardlock |
|--------------------------|-----------|

| | |
|-----------------------|-------------|
| Mating Retention Type | Locking Tab |
|-----------------------|-------------|

| | |
|-------------------------|-------------|
| Connector Mounting Type | Board Mount |
|-------------------------|-------------|



| | |
|---------------------|---------|
| Mating Alignment | With |
| PCB Mount Alignment | Without |
| PCB Mount Retention | With |

Housing Features

| | |
|-----------------------|-------------------|
| Mating Entry Location | Side |
| Housing Material | Nylon |
| Centerline (Pitch) | 4.14 mm [.162 in] |

Dimensions

| | |
|-----------------------------|--------------------|
| Connector Length | 14 mm [.551 in] |
| Connector Height | 11.86 mm [.467 in] |
| Connector Width | 12.7 mm [.5 in] |
| PCB Thickness (Recommended) | 1.57 mm [.062 in] |
| Row-to-Row Spacing | 4.14 mm [.162 in] |

Usage Conditions

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

Operation/Application

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

Industry Standards

| | |
|---------------------------------------------|-------------------------------|
| UL Rating | Recognized |
| Glow Wire Rating | Standard Part - Not Glow Wire |
| Compatible With Agency/Standards Products | CSA, UL |
| Compatible With Approved Standards Products | UL E28476 |
| UL Flammability Rating | UL 94V-0 |

Packaging Features

| | |
|--------------------|-----|
| Packaging Quantity | 100 |
| 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 2024 (241) Candidate List Declared Against: JUNE 2024 (241) 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

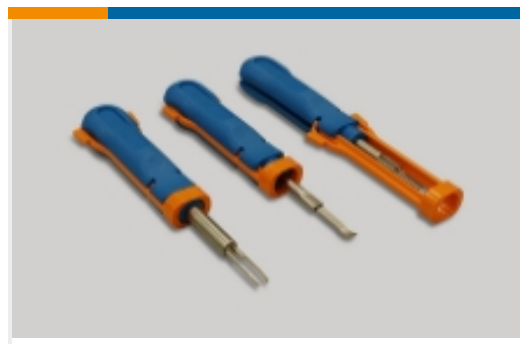
| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>TE Part # 794895-1 6 CIR MINI UMNL RND WIRE HOLES</p> |  <p>TE Part # 794772-6 06P MINI UMNL SEAL, DIE CUT</p> |  <p>TE Part # 794190-1 06P MINI UMNL2 PLUG HSG UL94V0</p> |  <p>TE Part # 172168-1 6 CIR UNIV M-N-L PLUG</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

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

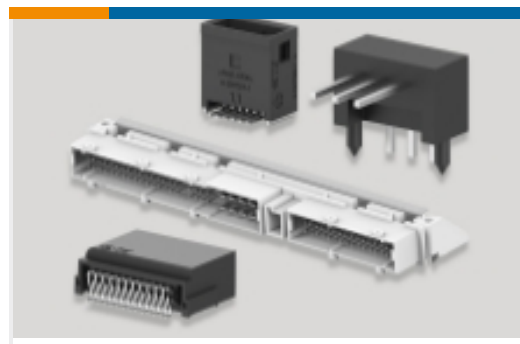
| | | | |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Connector Caps & Covers(2)</p> |  <p>Connector Contacts(89)</p> |  <p>Connector Hardware(4)</p> |  <p>Connector Seals & Cavity Plugs(17)</p> |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|



Connector Strain Relief(2)



Insertion & Extraction Tools(1)

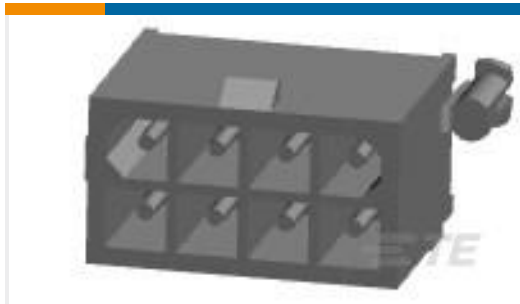


PCB Headers & Receptacles(93)



Rectangular Power Connectors(104)

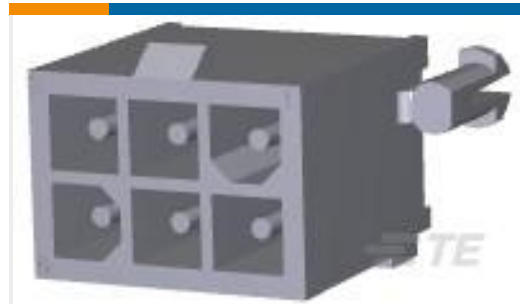
Customers Also Bought



TE Part #1-794073-0
08P MINI UMNL HDR W/O DH SN LF



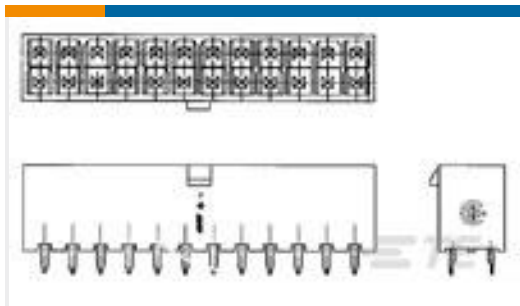
TE Part #1-770971-0
10P MINI UMNL R/A HDR ASSY SN



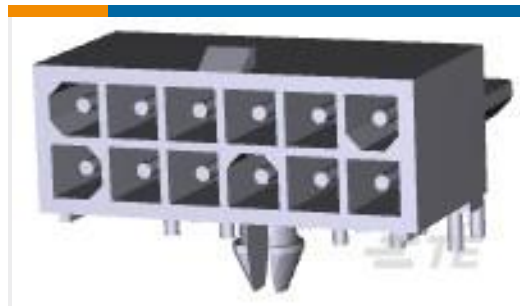
TE Part #1-770875-0
06P MINI UMNL HDR ASSY SN



TE Part #1-770876-0
09P MINI UMNL HDR ASSY SN



TE Part #1-1586038-8
18P VRT HDR VAL-U-LOK V0



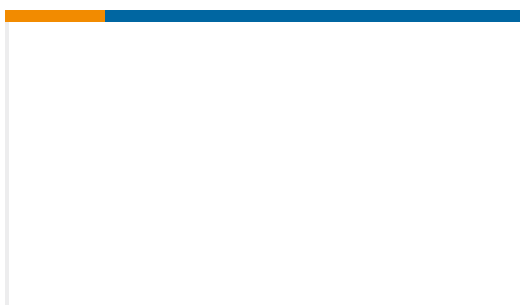
TE Part #1-770972-0
12P MINI UMNL R/A HDR ASSY LF



TE Part #1SNL906604R0000
BJCI6-4



TE Part #2271015-2
AMPMODU, PIN HEADER, 2ROW,2.54 PITCH,40PO



TE Part #2029142-4
4P VERT HDR VAL-U-LOK V0 BLU

Documents

Product Drawings

[06P MINI UMNL R/A HDR ASSY SN](#)

English

CAD Files

[3D PDF](#)

[3D](#)

[Customer View Model](#)

[ENG_CVM_CVM_1-770969-0_E.2d_dxf.zip](#)



English

Customer View Model

[ENG_CVM_CVM_1-770969-0_E.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770969-0_E.3d_stp.zip](#)

English

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Datasheets & Catalog Pages

[SOFT_SHELL_PIN_AND_SOCKET_CONNECTORS_CATALOG](#)

English

Product Specifications

[Application Specification](#)

English

Instruction Sheets

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

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Agency Approvals

[UL](#)

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