# 1-770876-1 ✔ ACTIVE

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

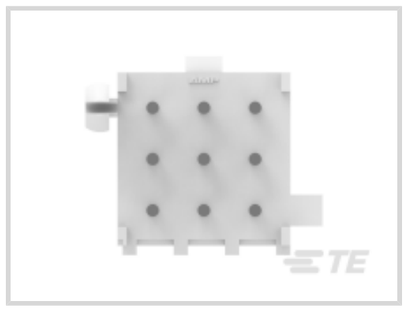
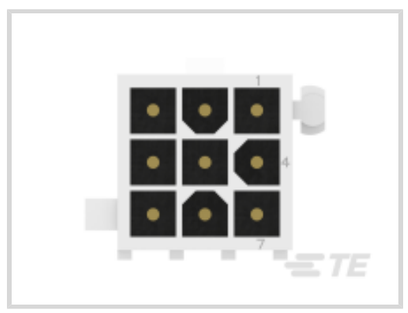
TE Internal #: 1-770876-1

PCB Mount Header, Vertical, Wire-to-Board, 9 Position, 4.14 mm [.162 in] Centerline, Fully Shrouded, Gold, Mini-Universal MATE-N-LOK

View on TE.com >

Connectors > PCB Connectors > PCB Headers & Receptacles



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

PCB Mount Orientation: **Vertical**

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

Number of Positions: **9**

Number of Rows: **3**

## Features

### Electrical Characteristics

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

### Dimensions

| | |
|---|---|
| Row-to-Row Spacing | 4.14 mm[.162 in] |
| Connector Width | 16.03 mm[.631 in] |
| PCB Thickness (Recommended) | 1.57 mm[.062 in] |
| Connector Height | 13.49 mm[.531 in] |
| Connector Length | 19.15 mm[.754 in] |
| Profile Height from PCB | 14.25 mm[.56 in] |

### Packaging Features

| | |
|---|---|
| Packaging Quantity | 200 |
| Packaging Method | Bag |

### Industry Standards

| | |
|---|---|
| Compatible With Agency/Standards Products | UL, CSA |
| UL Rating | Recognized |

| | |
|---|---|
| Compatible With Approved Standards Products | UL E28476 |
| Glow Wire Rating | Standard Part - Not Glow Wire |
| UL Flammability Rating | UL 94V-0 |

## Usage Conditions

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

## Body Features

| | |
|---|---|
| PCB Retention Feature Material | Nylon |
| Primary Product Color | White |

## Mechanical Attachment

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

## 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 |

## Contact Features

| | |
|---|---|
| Contact Underplating Material | Nickel |
| Mating Pin Diameter | 1 mm[.039 in] |
| Contact Underplating Material Thickness | 1.27 µm[50 µin] |
| PCB Contact Termination Area Plating Material Finish | Matte |
| Contact Size | 1mm |
| Contact Mating Area Plating Material Thickness | .76 µm[30 µin] |
| PCB Contact Termination Area Plating Material Thickness | 3.81 – 8.89 µm[150 – 350 µin] |
| Contact Shape & Form | Round |

| | |
|---|---|
| Contact Layout | Matrix |
| Contact Base Material | Brass |
| PCB Contact Termination Area Plating Material | Tin |
| Contact Mating Area Plating Material | Gold |
| Contact Type | Pin |
| Contact Current Rating (Max) | 9.5 A |

## Housing Features

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

## Configuration Features

| | |
|---|---|
| Number of Columns | 3 |
| Number of Loaded Positions | 9 |
| Number of Power Positions | 9 |
| Connector Contact Load Condition | Fully Loaded |
| PCB Mount Orientation | Vertical |
| Number of Positions | 9 |
| Number of Rows | 3 |

## 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 |

## Operation/Application

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

## Other

| | |
|---|---|
| EU RoHS Compliance | Compliant |
| EU ELV Compliance | Compliant |

## 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)<br>Candidate List Declared Against: JUNE 2024 (241)<br>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 | Not reviewed for solder process capability |

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 # 794194-1
09P MINI UMNL2 PLUG HSG UL94V0



TE Part # 172169-1
9 CIR UNIV M-N-L PLUG

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



Connector Caps & Covers(2)



Connector Contacts(89)



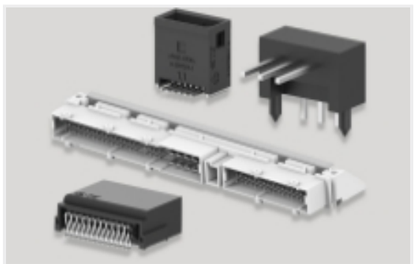
Connector Seals & Cavity Plugs(17)



Connector Strain Relief(2)



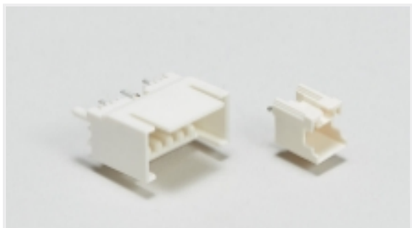
Insertion & Extraction Tools(1)



PCB Headers & Receptacles(93)



Power Contacts(89)



Wire-to-Board Headers & Receptacles (93)

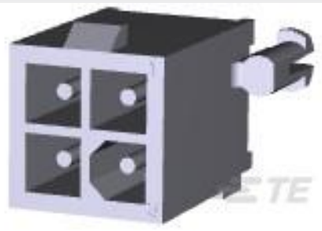
## Customers Also Bought



TE Part #1418994-1
AMP MCP 2.8 HSG.WITH SEC.10POS



TE Part #60619-5
CMNL SOK AUBR L/P



TE Part #1-770874-1
04P MINI UMNL HDR ASSY AU LF



TE Part #CAT-AM78-H342
AMPSEAL PCB Vertical Headers



TE Part #3-1393789-8
V23079A2006B301



TE Part #1-968853-1
AMP MCP 2.8, CONTACT



TE Part #53073
TERMINAL,PIDG R 26-24 6



TE Part #2-327956-1
PIDG RECT 22-16COMM 22-18MIL 6

## Documents

### Product Drawings

09P MINI UMNL HDR ASSY AU LF

English

### CAD Files

3D PDF

3D

### Customer View Model

ENG_CVM_CVM_1-770876-1_H.2d_dxf.zip

English

### Customer View Model

ENG_CVM_CVM_1-770876-1_H.3d_igs.zip

English

### Customer View Model

ENG_CVM_CVM_1-770876-1_H.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

## Instruction Sheets

### Instruction Sheet (U.S.)

English

## Agency Approvals

### UL

English