1-770186-1 ✔ ACTIVE

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

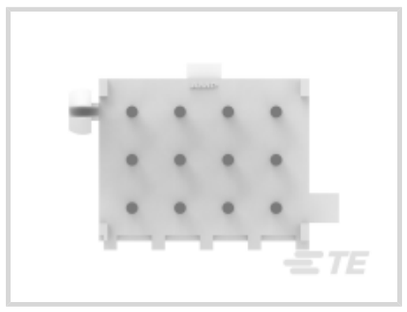
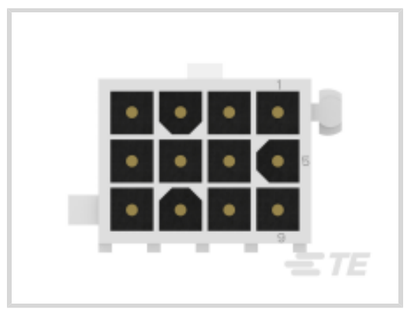
TE Internal #: 1-770186-1

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 12 Position, 4.14 mm [.162 in] 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: **12**

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	12
PCB Mount Orientation	Vertical
Number of Power Positions	12
Number of Signal Positions	0
Number of Rows	3

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	Matrix
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

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

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

Dimensions

Compatible Insulation Diameter (Max)	3.2 mm[3.2 in]
Connector Height	13.49 mm
PCB Thickness (Recommended)	.06 mm[1.57 in]

Product Width	13.97 mm
Product Length	18.11 mm
Compatible Insulation Diameter Range	3.2 mm
Row-to-Row Spacing	4.14 mm[.163 in]

Usage Conditions

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

Operation/Application

Circuit Application	Power

Identification Marking

Circuit Identification Feature	With

Industry Standards

CSA Rating	Certified, LR 7189
UL Rating	Recognized
Compatible With Agency/Standards Products	CSA, UL
Compatible With Approved Standards Products	UL E28476
UL Flammability Rating	UL 94V-0
Glow Wire Rating	Standard Part - Not Glow Wire

Packaging Features

Packaging Quantity	200
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: JAN 2024 (240) Candidate List Declared Against: JAN 2024 (240) Does not contain REACH SVHC
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free

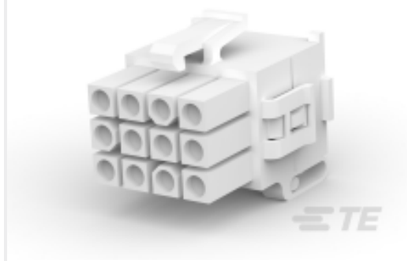
Solder Process Capability

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 # 794200-1
12P MINI UMNL2 PLUG HSG MATRIX



TE Part # 172170-1
12 CIR UNIV M-N-L PLUG

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



Connector Caps & Covers(2)



Connector Contacts(89)



Connector Hardware(4)



Connector Seals & Cavity Plugs(17)



Connector Strain Relief(2)

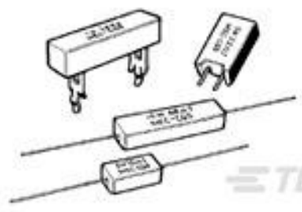


Insertion & Extraction Tools(1)



Rectangular Power Connectors(197)

Customers Also Bought



TE Part # 2-1623789-6
SQM7 390R 5% (WIRE)



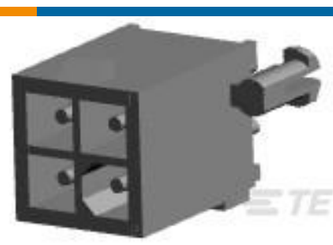
TE Part # 1-794065-1
08P MINI UMNL HDR W/DH AU LF



TE Part # 1-770178-1
06P MINI UMNL ASSY VO SNAU LF



TE Part # 1-770170-1
03P MINI UMNL ASSY VO SNAU LF



TE Part # 1-770174-1
04P MINI UMNL ASSY VO SNAU LF



TE Part # 4-794619-6
16P MICRO MNL ASSY,R/A,HDR LF



TE Part # 5-146254-7
14 MODII HDR DRST B/A .100CL



TE Part # 796642-4
4POS 5.0MM CE VRT HDR,TRM BLK



TE Part # 4-794619-8
18P MICRO MNL ASSY,R/A,HDR LF

Documents

Product Drawings

12P MINI UMNL ASSY VO SNAU LF

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_1-770186-1_N.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_1-770186-1_N.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_1-770186-1_N.3d_stp.zip

English

By downloading the CAD file I accept and agree to the Terms and Conditionsof 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