

1-770971-1 ✓ ACTIVE

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

TE Internal #: 1-770971-1

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 10 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: **10**

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	10
PCB Mount Orientation	Right Angle
Number of Power Positions	10
Number of Signal Positions	0
Number of Rows	2

Electrical Characteristics

Operating Voltage	600 VDC
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Contact Features

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-Lead
Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	.76 μ m[30 μ in]
Contact Termination Area Plating Thickness	3.81 μ m[150 μ in]

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[3.2 in]
Wire Size	100.5 – 2853 CMA
Row-to-Row Spacing	4.14 mm[.163 in]
Width	12.7 mm



PCB Thickness (Recommended)	.06 mm[1.57 in]
Height	11.86 mm
Length	22.28 mm

Usage Conditions

Operating Temperature Range	-55 – 105 °C[-67 – 221 °F]
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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
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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 2022 (224) Candidate List Declared Against: JUNE 2022 (224) 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 # 794781-1
10P MINI UMNL PLUG HSG



TE Part # 770580-1
10P MINI UMNL PLUG HSG



TE Part # 794196-1
10P MINI UMNL2 PLUG HSG UL94V0



TE Part # 1-794772-0
10P MINI UMNL SEAL, DIE CUT

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)

Documents

Product Drawings

[10P MINI UMNL R/A HDR ASSY LF](#)

English

CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_1-770971-1_E.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770971-1_E.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770971-1_E.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

[MD_1-770971-1_11082017135_dmtec](#)

English

[MD_1-770971-1_11082017135_dmtec](#)

English

Instruction Sheets

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



English

Agency Approvals

UL

English