

1-770186-0 ✓ ACTIVE

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

TE Internal #: 1-770186-0

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 12 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: **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
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Contact Features

Contact Layout	Matrix
Contact Base Material	Brass
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	4.45 mm[.175 in]
Termination Method to Printed Circuit Board	Through Hole - Solder

Mechanical Attachment

Strain Relief	Without
Mating Alignment Type	Polarization
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	Latch

Housing Features

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

Dimensions

Row-to-Row Spacing	4.14 mm[.163 in]
PCB Thickness (Recommended)	.06 mm[1.57 in]
Width	16.03 mm[.631 in]



Height	13.49 mm[.531 in]
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Length	18.11 mm[.712 in]
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Usage Conditions

Operating Temperature Range	-55 – 105 °C[-67 – 221 °F]
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Operation/Application

Circuit Application	Power
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Industry Standards

UL Flammability Rating	UL 94V-0
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Glow Wire Rating	Standard Part - Not Glow Wire
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VDE Tested	No
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Packaging Features

Packaging Method	Bag
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Packaging Quantity	200
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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
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EU ELV Directive 2000/53/EC	Compliant
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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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
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Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
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Solder Process Capability	Wave solder capable to 265°C
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Product Compliance Disclaimer

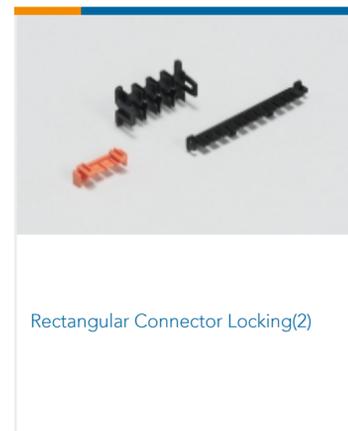
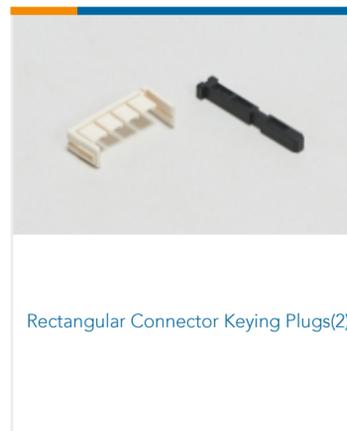
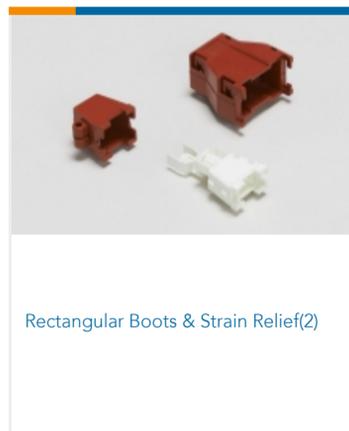
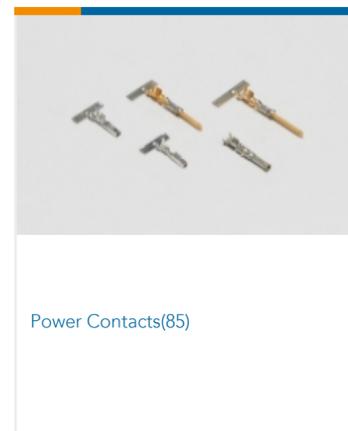
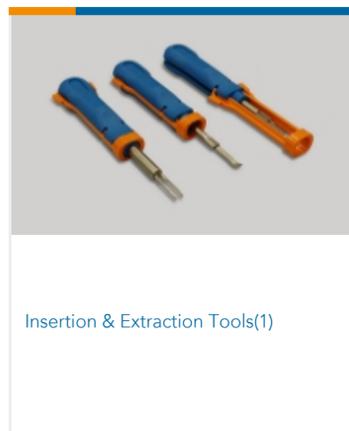
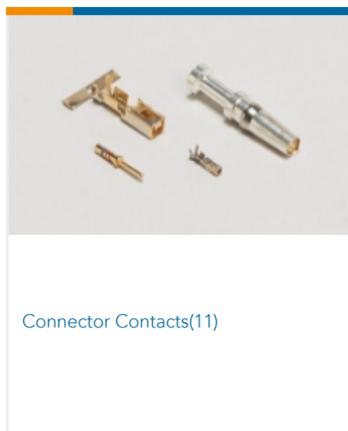
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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



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



Documents



Product Drawings

[12P MINI-UMNL ASSY V0 SNNI*](#)

English

CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_1-770186-0_N.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770186-0_N.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-770186-0_N.3d_stp.zip](#)

English

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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

Instruction Sheets

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

English

Agency Approvals

[UL](#)

English
