

643408-1 ✓ ACTIVE

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

TE Internal #: 643408-1

Rectangular Power Connectors, Header, Plug, Wire-to-Board, 6
Position, .25 in [6.35 mm] Centerline, Printed Circuit Board,
Universal MATE-N-LOK

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Connectors > Power Connectors > Rectangular Power > Rectangular Power Connectors



Rectangular Power Connector Type: **Header**

Connector & Housing Type: **Plug**

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

Number of Positions: **6**

Centerline (Pitch): **6.35 mm [.25 in]**

Features

Product Type Features

| | |
|-----------------------------------|-----------------------|
| Rectangular Power Connector Type | Header |
| Connector & Housing Type | Plug |
| Connector System | Wire-to-Board |
| Sealable | No |
| Connector & Contact Terminates To | Printed Circuit Board |

Configuration Features

| | |
|---------------------------|----------|
| Number of Positions | 6 |
| PCB Mount Orientation | Vertical |
| Number of Power Positions | 6 |
| Number of Rows | 1 |

Electrical Characteristics

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

Contact Features

| | |
|----------------|--------|
| Contact Layout | Inline |
|----------------|--------|



| | |
|--|---|
| Multiple Contact Types | Without |
| Contact Current Rating (Max) | 12 A |
| Contact Retention Within Housing | Without |
| Contact Type | Pin |
| PCB Contact Termination Area Plating Material | Pre-Tin |
| Contact Mating Area Plating Material | Pre-Tin |
| Contact Mating Area Plating Material Thickness | 3.81 – 5.08 μm [150 – 200 μin] |

Termination Features

| | |
|---|-----------------------|
| Termination Post & Tail Length | 3.8 mm[.148 in] |
| Termination Method to Printed Circuit Board | Through Hole - Solder |

Mechanical Attachment

| | |
|--------------------------|-------------------------|
| PCB Mount Alignment Type | Standard Polarized Tail |
| Strain Relief | Without |
| Mating Alignment Type | Polarization |
| Mating Alignment | With |
| PCB Mount Alignment | With |
| Panel Mount Feature | Without |
| PCB Mount Retention | Without |
| Connector Mounting Type | Board Mount |
| Mating Retention | With |
| Mating Retention Type | Positive Lock |

Housing Features

| | |
|--------------------|-----------------|
| Centerline (Pitch) | 6.35 mm[.25 in] |
| Housing Color | White |
| Housing Material | Nylon |

Dimensions

| | |
|-----------------------------|------------------|
| Width | 13.97 mm |
| PCB Thickness (Recommended) | 3.18 mm[.125 in] |
| Height | 7.62 mm |
| Length | 39.7 mm |

Usage Conditions

| | |
|-----------------------------|--|
| Operating Temperature Range | -40 – 105 $^{\circ}\text{C}$ [-40 – 221 $^{\circ}\text{F}$] |
|-----------------------------|--|



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 | Yes |

Packaging Features

| | |
|--------------------|-----------|
| Packaging Method | Bag & Box |
| Packaging Quantity | 100 |

Other

| | |
|--------------|---|
| For Use With | Mates with Plug Housing (Using Socket Contacts) |
|--------------|---|

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



Also in the Series | Universal MATE-N-LOK



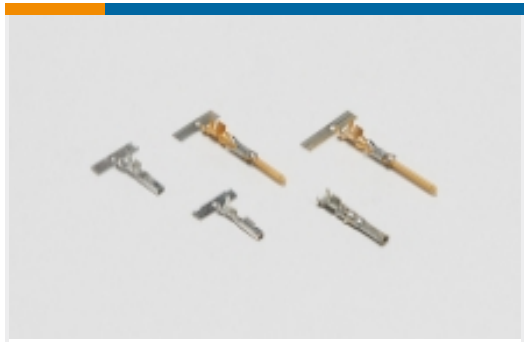
Circular Power Connectors(2)



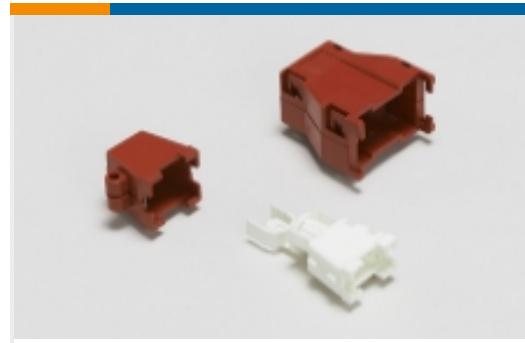
Connector Contacts(11)



Insertion & Extraction Tools(4)



Power Contacts(207)



Rectangular Boots & Strain Relief(35)



Rectangular Connector Adapters(7)



Rectangular Connector Hardware(1)



Rectangular Connector Housings(2)



Rectangular Connector Keying Plugs(3)



Rectangular Connector Locking(4)



Rectangular Connector Seals(26)



Rectangular Power Connectors(729)

Customers Also Bought



TE Part #2-324955-1
TERMINAL,SOLIS R 16-14 8



TE Part #643410-1
08P UMNL PIN HDR ASSY POL 94VO



TE Part #641968-3
04P UMNL PIN HDR ASSY POL 94VO



TE Part #641974-1
12P UMNL PIN HDR ASSY 94VO



TE Part #3-644615-2
02P MTA156 POL HDR ASSY LF



TE Part #643416-1
04P UMNL HDR ASSY POL 94VO



TE Part #1-641964-1
02P UMNL HDR ASSY POL BLK



TE Part #5-103672-9
10 MTE HDR SRRA LATCH W/HLDWN



Documents

CAD Files

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_643408-1_D.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_643408-1_D.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_643408-1_D.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_SOCKET_CONNECTORS_STANDARD_DENSITY](#)

English

Product Specifications

[Application Specification](#)

English

Product Environmental Compliance

[MD_643408-1_080720182138_dmtec](#)

English

[MD_643408-1_080720182138_dmtec](#)

English

Instruction Sheets

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

English

Agency Approvals

[CSA Certificate](#)

English