

643407-1 ✓ ACTIVE

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

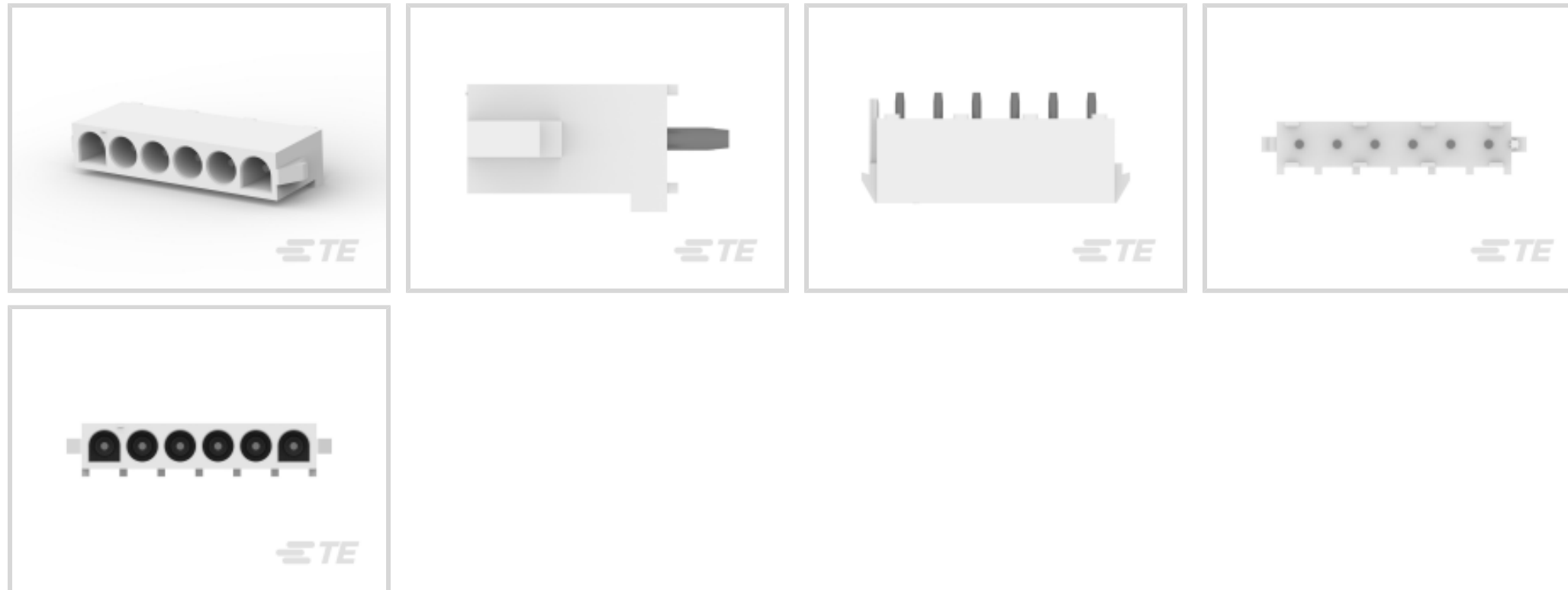
TE Internal #: 643407-1

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 6 Position, 6.35 mm [.25 in] Centerline, Printed Circuit Board, 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: **6**

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

## Features

### Product Type Features

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

### Electrical Characteristics

Operating Voltage	600 VAC
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### Contact Features

Contact Layout	Inline
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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	Tin
Contact Mating Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]

### 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	Natural
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 $^{\circ}\text{F}$ ]
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### Operation/Application

Assembly Integration Feature	Without
Circuit Application	Power

### Industry Standards

CSA Rating	Certified
UL Flammability Rating	UL 94V-2
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
Packaging Quantity	100

### Other

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



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



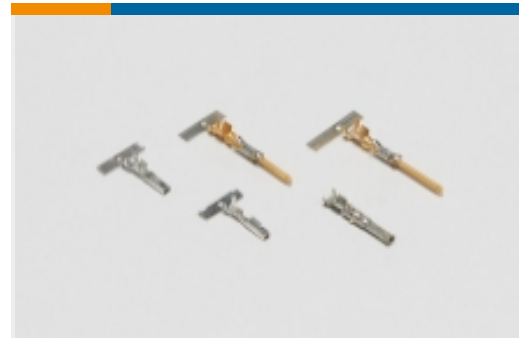
Circular Power Connectors(2)



Connector Contacts(11)



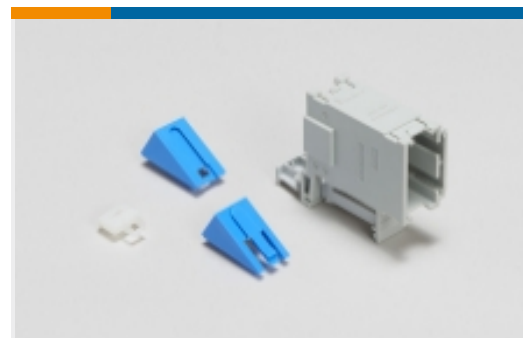
Insertion &amp; Extraction Tools(4)



Power Contacts(207)



Rectangular Boots &amp; Strain Relief(35)



Rectangular Connector Adapters(7)



Rectangular Connector Hardware(1)



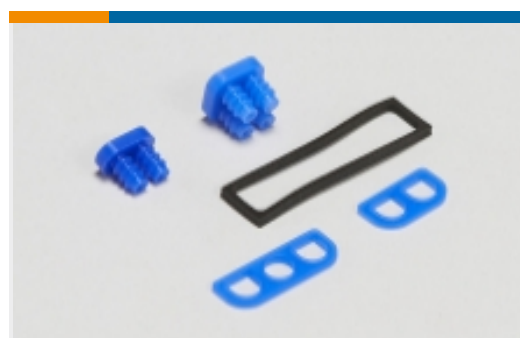
Rectangular Connector Housings(2)



Rectangular Connector Keying Plugs(3)



Rectangular Connector Locking(4)



Rectangular Connector Seals(26)



Rectangular Power Connectors(728)

## Documents

### CAD Files

3D PDF

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_643407-1\\_K.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_643407-1\\_K.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_643407-1\\_K.3d\\_stp.zip](#)

English

3D PDF

English

Customer View Model

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English

**Customer View Model**

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English

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**Datasheets & Catalog Pages**

[SOFT\\_SHELL\\_PIN\\_SOCKET\\_CONNECTORS\\_STANDARD\\_DENSITY](#)

English

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**Product Specifications**

[Application Specification](#)

English

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**Product Environmental Compliance**

[MD\\_643407-1\\_082720172312\\_dmtec](#)

English

[MD\\_643407-1\\_082720172312\\_dmtec](#)

English

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**Instruction Sheets**

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

English

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**Agency Approvals**

[CSA Certificate](#)

English