

643408-1 ✓ ACTIVE

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

TE Internal #: 643408-1

PCB Mount Header, Vertical, Wire-to-Board, 6 Position, 6.35 mm [.25 in] Centerline, Fully Shrouded, Pre-Tin, Universal MATE-N-LOK

[View on TE.com >](#)



Connectors > PCB Connectors > PCB Headers & Receptacles



EU RoHS Compliance: **Compliant**

EU ELV Compliance: **Compliant**

PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

## Features

### Other

EU RoHS Compliance	Compliant
EU ELV Compliance	Compliant

### Product Type Features

Mixed & Hybrid Header	No
Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Header
Connector System	Wire-to-Board
Header Type	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

Number of Columns	6
Number of Loaded Positions	6
Number of Power Positions	6



Connector Contact Load Condition	Fully Loaded
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PCB Mount Orientation	Vertical
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Number of Positions	6
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Number of Rows	1
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### Electrical Characteristics

Operating Voltage	600 VAC
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### Body Features

Primary Product Color	White
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### Contact Features

Contact Underplating Material	Nickel
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Mating Pin Diameter	2.2 mm[.087 in]
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Contact Underplating Material Thickness	1.27 – 1.79 $\mu\text{m}$ [50 – 70 $\mu\text{in}$ ]
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Contact Size	2.2mm
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Contact Mating Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]
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Contact Shape & Form	Round
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PCB Contact Termination Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]
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Contact Layout	Inline
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Contact Base Material	Phosphor Bronze
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PCB Contact Termination Area Plating Material	Pre-Tin
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Contact Mating Area Plating Material	Pre-Tin
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Contact Type	Pin
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Contact Current Rating (Max)	12 A
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### Termination Features

Termination Post & Tail Diameter	1.57 mm[.062 in]
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Termination Post & Tail Length	3.56 mm[.14 in]
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Termination Method to PCB	Through Hole - Solder
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### Mechanical Attachment

Panel Mount Feature	Without
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Mating Retention Type	Locking Tab
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Mating Retention	With
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Mating Alignment Type	Polarization
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PCB Mount Alignment Type	Standard Polarized Tail
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PCB Mount Retention	Without
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PCB Mount Alignment	With
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Connector Mounting Type	Board Mount
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Mating Alignment	With
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### Housing Features

Mating Entry Location	Top
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Housing Material	Nylon
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Centerline (Pitch)	6.35 mm [.25 in]
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### Dimensions

Connector Width	7.62 mm [.3 in]
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PCB Thickness (Recommended)	1.57 mm [.062 in]
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Connector Height	13.97 mm [.55 in]
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Profile Height from PCB	14.73 mm [.58 in]
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Connector Length	39.37 mm [1.55 in]
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### Usage Conditions

Operating Temperature (Max)	105 °C [221 °F]
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Operating Temperature Range	-40 – 105 °C [-40 – 221 °F]
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### Operation/Application

Circuit Application	Power
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### Industry Standards

Compatible With Agency/Standards Products	UL, VDE, CSA
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UL Rating	Recognized
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Compatible With Approved Standards Products	UL E28476
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Glow Wire Rating	Standard Part - Not Glow Wire
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UL Flammability Rating	UL 94V-0
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### Packaging Features

Packaging Quantity	100
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Packaging Method	Bag
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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
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 2024 (241) Candidate List Declared Against: JUNE 2024 (241) 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

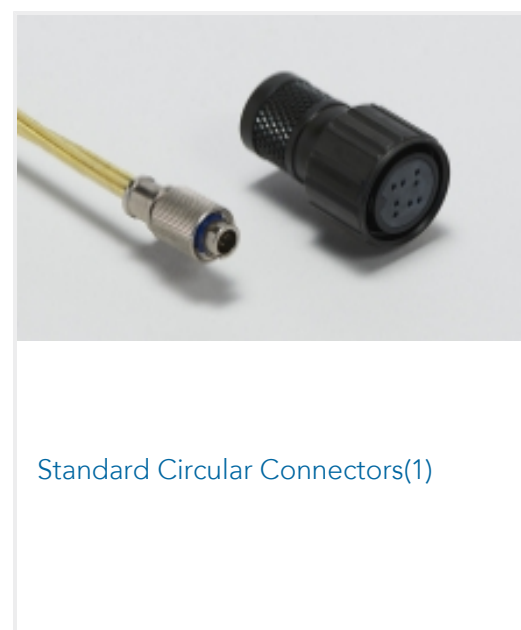
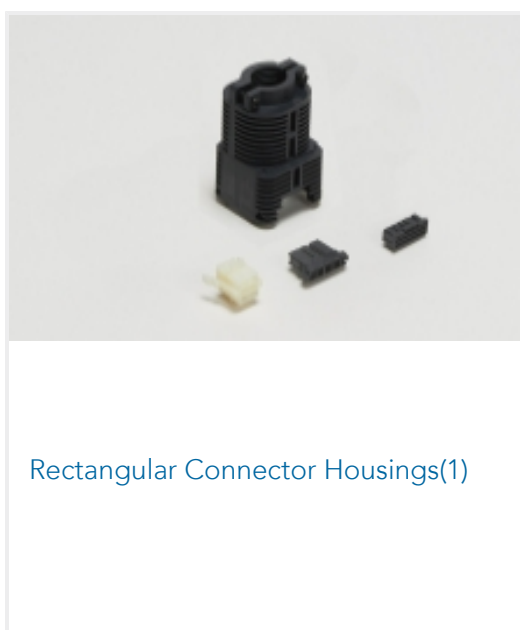
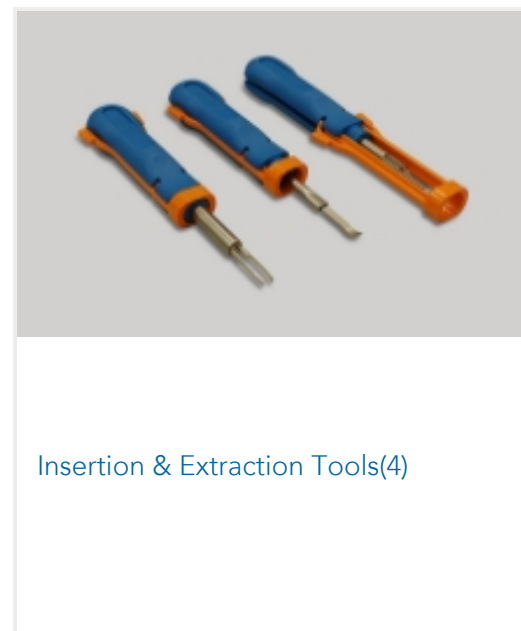
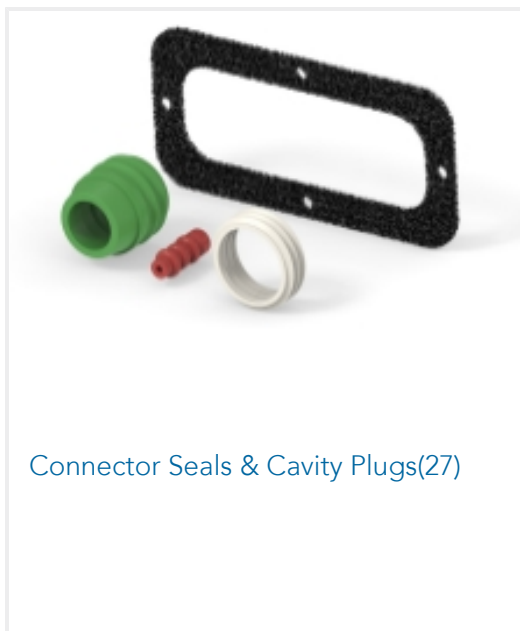
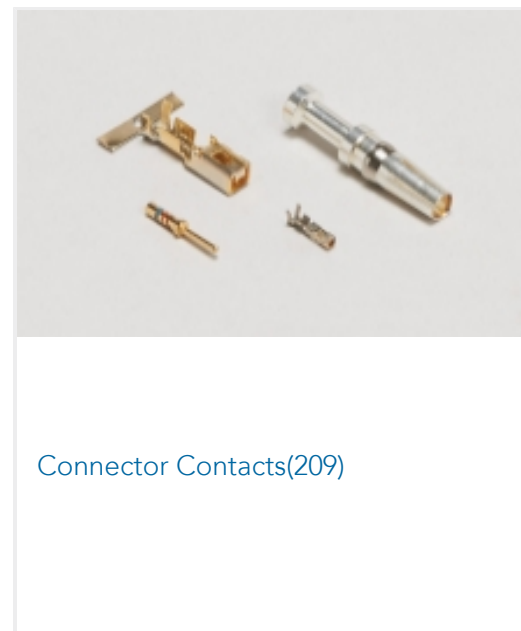
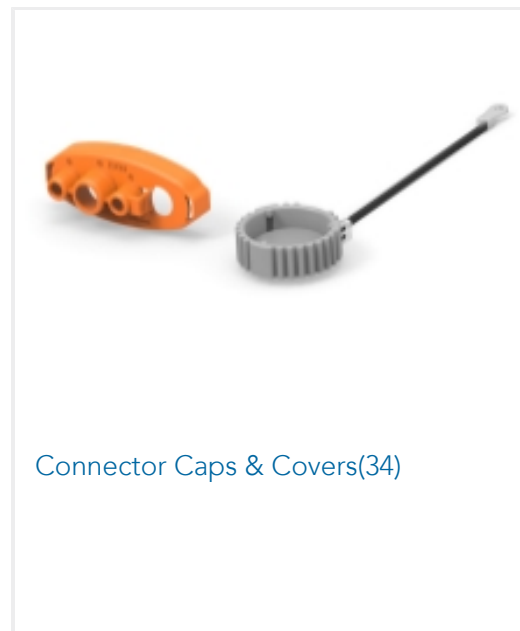
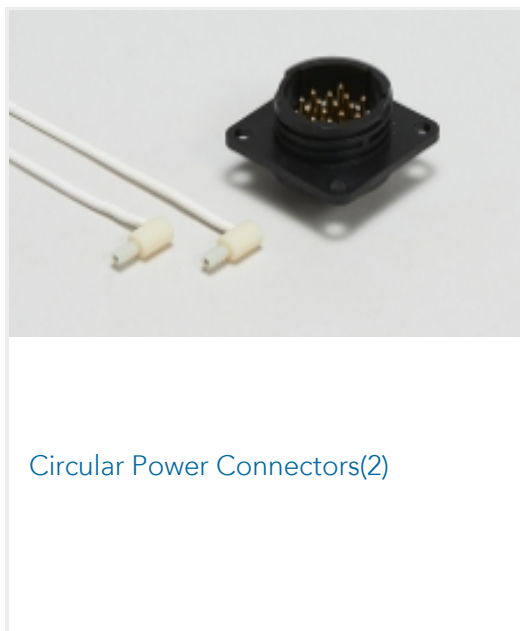
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight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

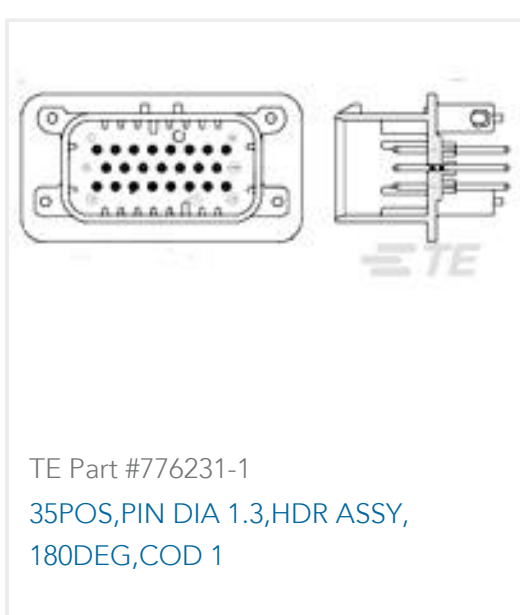
 <p>TE Part # 643585-2 06P UMNL STR/REL NATL</p>	 <p>TE Part # 1-350589-0 STR/REL CLAMP NATL</p>	 <p>TE Part # 350811-1 STR/REL CLAMP</p>	 <p>TE Part # 640581-1 06P UMNL PLUG HSG</p>
 <p>TE Part # 794275-1 06P UMNL INTERFACE SEAL</p>	 <p>TE Part # 794276-1 06P UMNL WIRE SEAL</p>	 <p>TE Part # 794993-1 06P UMNL BLACK INTERFACE SEAL</p>	 <p>TE Part # 643406-3 05P UMNL PIN HDR ASS BLK 94VO</p>

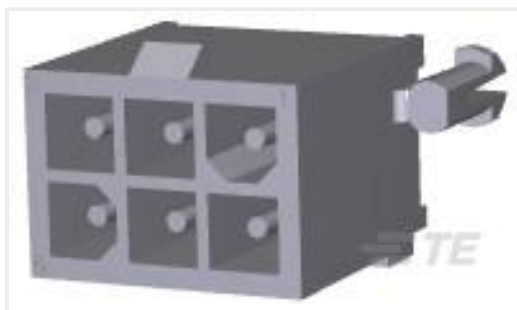


Also in the Series | **Universal MATE-N-LOK**



Customers Also Bought





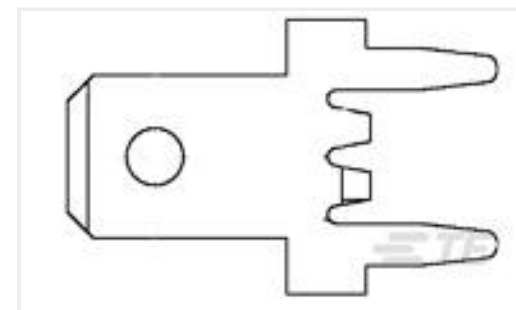
TE Part #1-770875-1  
06P MINI UMNL HDR ASSY AU LF



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



TE Part #643411-1  
02P UMNL HDR ASSY POL



TE Part #1217124-1  
187 FASTON,PCB TAB,TNBR



TE Part #2-1734592-0  
FPC CONN. 0.5MM PITCH B/C, 20P



TE Part #2-1734592-5  
FPC CONN. 0.5MM PITCH B/C, 25P

## Documents

### Product Drawings

[06P UMNL PIN HDR ASSY POL 94VO](#)

English

### 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

### Instruction Sheets

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



English

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**Agency Approvals**

**UL**

English