



# RECTANGULAR POWER CONNECTORS



TE CONNECTIVITY (TE)

## 09P MINI UMNL ASSY VO SNAU LF

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

1-770182-1

TE Internal Number: 1-770182-1

Always EU RoHS/ELV Compliant

Product Type **Header**

Housing Type **Plug**

Connector System **Wire-to-Board**

Applies To **Printed Circuit Board**

Contact Current Rating (A) **9.5**

Active

PRODUCT DRAWING  
English

3D PDF

### Product Drawings

[HEADER ASSEMBLY, 9 CKT, MINI UNIVERSAL MATE-N-LOK](#)

PDF  
English

### CAD Files

[3D PDF](#)

PDF  
English

[Customer View Model](#)

2D\_DXF.ZIP  
English

[Customer View Model](#)

3D\_IGS.ZIP  
English

[Customer View Model](#)

3D\_STP.ZIP  
English

### Catalog Pages/Data Sheets

[SOFT\\_SHELL\\_PIN\\_AND\\_SOCKET\\_CONNECTORS\\_CATALOG](#)

PDF  
English

[1-1773458-0\\_MINI\\_UNIVERSAL\\_MATE\\_N\\_LOK\\_CONNECTOR\\_SYSTEM\\_ORG](#)

PDF  
English

### Product Specifications

Application Specification

[Mini-Universal MATE-N-LOK Connectors](#)

PDF  
English

### Product Environmental Compliance

TE Material Declaration

[MD\\_1-770182-1\\_02262016928\\_dmtec](#)

PDF  
English

Please review product documents or [contact us](#) for the latest agency approval information. Please Note: Use the Product Drawing for all design activity.

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Product Type Features	Product Type	<b>Header</b>
	Housing Type	<b>Plug</b>
	Contact Type	<b>Pin</b>

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Configuration Features	Number of Positions	<b>9</b>
	Centerline	<b>4.14 mm [ .163 in ]</b>
	PCB Mounting Orientation	<b>Vertical</b>
	Number of Rows	<b>3</b>
	Row-to-Row Spacing	<b>4.14 mm [ .163 in ]</b>
	Multiple Contact Types	<b>Without</b>
	Contact Layout	<b>Matrix</b>

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Electrical Characteristics	Contact Current Rating (A)	<b>9.5</b>
	Operating Voltage (VAC)	<b>600</b>
	Operating Voltage (VDC)	<b>600</b>

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Contact Features	Contact Retention	<b>Without</b>
	Contact Termination Area Plating Material	<b>Tin</b>
	Contact Termination Area Plating Thickness	<b>3.81 µm [ 150 µin ]</b>

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Termination Features	Wire/Cable Size (AWG)	<b>30 – 16</b>
	Wire/Cable Size (mm <sup>2</sup> )	<b>.05 – 1.308</b>
	Wire/Cable Size (CMA)	<b>100.5 – 2583</b>
	Termination Method to Wire/Cable	<b>Solder</b>
	Termination Method to PC Board	<b>Through Hole - Solder</b>
	Termination Post/Tail Length	<b>3.69 mm [ .145 in ]</b>

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Mechanical Attachment	Mating Alignment	<b>With</b>
	Mating Retention	<b>With</b>
	PCB Mount Retention	<b>With</b>
	PCB Mount Retention Type	<b>Boardlocks</b>
	Mating Alignment Type	<b>Chamfered Edges</b>
	PCB Mount Alignment	<b>Without</b>
	Assembly Integration Feature	<b>Without</b>



	Mating Retention Type	<b>Locking Tab</b>
	Panel Mount Retention	<b>Without</b>
	Strain Relief	<b>Without</b>
<hr/>		
Housing Features	UL Flammability Rating	<b>UL 94V-0</b>
	Housing Color	<b>White</b>
	Housing Material	<b>Nylon</b>
	Boardlock Material	<b>Nylon</b>
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Dimensions	Width (mm)	<b>13.97</b>
	Height (mm)	<b>13.49</b>
	PCB Thickness (Recommended)	<b>1.57 mm [ .062 in ]</b>
	Length (mm)	<b>13.97</b>
	Insulation Diameter (Max) (mm)	<b>3.2</b>
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Usage Conditions	Sealed Condition	<b>Sealed</b>
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Operation/Application	Connector System	<b>Wire-to-Board</b>
	Applies To	<b>Printed Circuit Board</b>
	Operating Temperature	<b>-55 – 105 °C [ -67 – 221 °F ]</b>
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Industry Standards	Glow Wire Rating	<b>Standard Part - Not Glow Wire</b>
	VDE Tested	<b>Yes</b>
	CSA Rating	<b>Certified</b>
	Agency/Standard Number	<b>E28476</b>
	UL Rating	<b>Recognized</b>
	CSA File Number	<b>LR7189</b>
	Agency/Standard	<b>CSA, UL</b>
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Packaging Features	Packaging Method	<b>Bag</b>
	Packaging Quantity	<b>200</b>
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Other	For Use With	<b>Plug Housing</b>
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Product Compliance

[Statement of Compliance](#)  
PDF

[VIEW ALL PRODUCT COMPLIANCE](#)

## CUSTOMERS ALSO BOUGHT

FPC CONNECTORS	STANDARD RECTANGULAR CONNECTORS	RECTANGULAR POWER CONNECTORS	RECTANGULAR POWER CONNECTORS
			
1.0 FPC, ZIF V/T, SMT, 3P 1734248-3	DYNAMIC D3200 HDR V ASSY 3P 2-178136-5	15P MINI UMNL ASSY VO SNAU LF 1-770190-1	12P MINI UMNL ASSY VO SNAU LF 1-770186-1
<a href="#">Save to List</a> <a href="#">Find Similar Products</a>	<a href="#">Save to List</a> <a href="#">Find Similar Products</a>	<a href="#">Save to List</a> <a href="#">Find Similar Products</a>	<a href="#">Save to List</a> <a href="#">Find Similar Products</a>

Products - 2 Results

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Relation Type ▼

RELATIONSHIP

### Mating Products

Used to identify Mating Parts

[See All Mating Products](#)


PRODUCT - MATING PRODUCTS		<input checked="" type="checkbox"/>
	<p>Connectors - Rectangular Power Connectors MATE-N-LOK I Mini-Universal MATE-N-LOK</p> <p><b>9 CIR UNIV M-N-L PLUG</b> - 172169-1</p> <p>TE INTERNAL NUMBER: 172169-1</p> <p>✓ Active</p>	<p>Always EU RoHS/ELV Compliant</p> <p>Product Type <b>Housing</b></p> <p>Housing Type <b>Plug</b></p> <p>Connector System <b>Wire-to-Wire</b></p> <p>Applies To <b>Wire/Cable</b></p> <p>Number of Positions <b>9</b></p>

RELATIONSHIP

### Mating Products

Used to identify Mating Parts

[See All Mating Products](#)

PRODUCT - MATING PRODUCTS		<input checked="" type="checkbox"/>
	<p>Connectors - Rectangular Power Connectors MATE-N-LOK I Mini-Universal MATE-N-LOK 2</p> <p><b>09P MINI UMNL2 PLUG</b> HSG UL94V0 - 794194-1</p> <p>TE INTERNAL NUMBER: 794194-1</p> <p>✓ Active</p>	<p>Always EU RoHS/ELV Compliant</p> <p>Product Type <b>Housing</b></p> <p>Housing Type <b>Plug</b></p> <p>Connector System <b>Wire-to-Wire</b></p> <p>Applies To <b>Wire/Cable</b></p> <p>Number of Positions <b>9</b></p>