

Mini-Fit Sigma Sealed Power Connectors

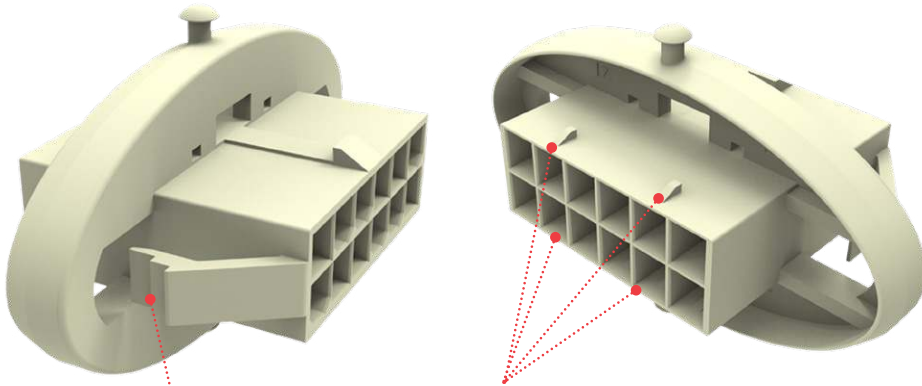
molex

Mini-Fit Sigma Sealed Wire-to-Wire Connectors utilize traditional Mini-Fit TPA2 terminals and wire gauges while providing protection from water, foam and dust debris ingress

Housing Features and Advantages



Mini-Fit Sigma Sealed Assembly



Mini-Fit Sigma Sealed Housing

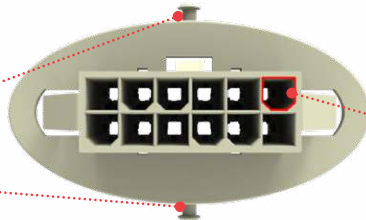
Panel Mount Ears
 Recommended panel cut-outs for 0.89mm to 3.00mm thick panels
 Panel cut-out tolerances +0.10mm
 Provides safety, and stability of housing to the panel

TPA supports
 Used to properly support the optional TPAs after terminals are inserted and seated into the housing

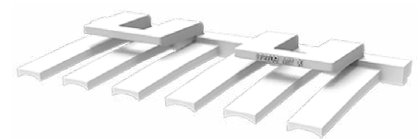


Mini-Fit Sigma Sealed Cap

Seal cap supports
 Provides excellent support for the rubber cap that mounts around the back of the housing.

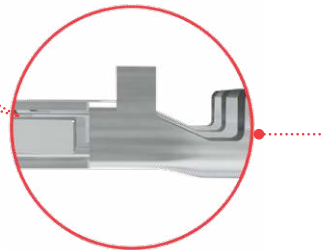
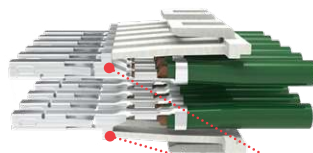


Keying and polarization
 Allows for accurate mating to standard Mini-Fit 3.0 Power Connectors

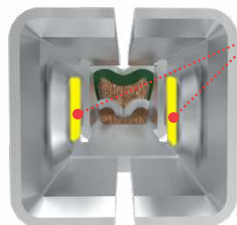


Mini-Fit Sigma Sealed TPA

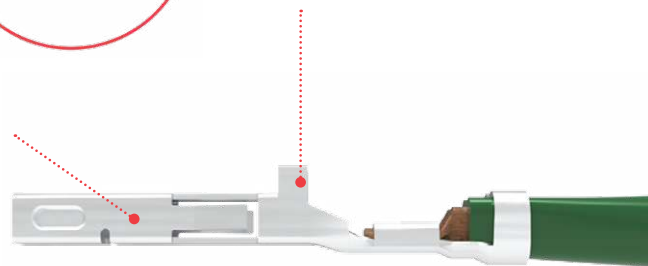
Features and Advantages



TPA stop
 Provides stability for the terminal in the receptacle housing. Offers a physical block for the terminals to back out if a TPA is properly inserted



Elongated contact points
 Provides larger contact area



Mini-Fit Sigma Sealed Power Connectors

molex

Markets and Applications

Commercial Vehicle

- Buses
- Trains
- Boats
- Emergency vehicles
- Refrigeration vehicles
- Agriculture vehicles



Robotic Arm



White Goods



Vending Machine

Home Appliance

- Refrigerators
- Ovens
- Dishwashers

Consumer

- Vending machines

Industrial Automation

- Robotic arm
- Drives and conveyer lines
- Motors
- Process control

Specifications

REFERENCE INFORMATION

Packaging: Bag, Reel
UL File No.: E29179
CSA File No.: LR19980
Mates With: All Applicable Mini-Fit Connectors
Use With: TPA: 172709, CAP: 207019
Terminal Used: 172718, 172765
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Capable: Yes

ELECTRICAL

Voltage (max.): 600V AC (rms) / DC
Current (max.): 13.0A
Contact Resistance (max.): 10 milliohms
Dielectric Withstanding Voltage:
No breakdown. Current leakage < 5 mA
Insulation Resistance (min.): 1000 megohms

MECHANICAL

Contact Insertion Force (max.): 15.0 N
Contact Retention to Housing (min.): 30.0 N
Insertion Force to PCB (max.): 225 N
PCB Retention Force (min.): 100 N
Foam Leakage Test: See Product Spec
Durability: 8 Hours
Shock (max.): 20 milliohms

PHYSICAL

Pitch: 4.20mm
Wire Gauge: 16 to 24AWG
PCB Thickness: 0.89 to 3.00mm thick
Operating Temperature: -40 to +105°C

www.molex.com/link/minifit.html

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.