

# Mini-Fit Connector Family

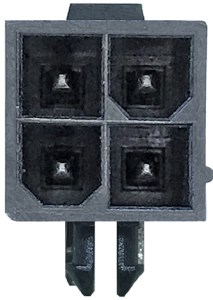


The Mini-Fit Connector Family delivers up to 13.0A, while blind-mating and terminal position assurance options provide a versatile connector system for a wide range of applications

## Features and Advantages

### Fully isolated terminals

Protect against potential damage during handling



### Polarized mating geometry

Ensures header and receptacle cannot be mated



### Crimp terminals are produced from a proprietary, high-current alloy

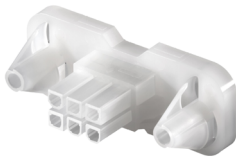
Rated up to 13.0A per circuit

### Terminals feature a patented, elongated dimple design

Provide long wipe lengths and increased contact area for improved long-term reliability

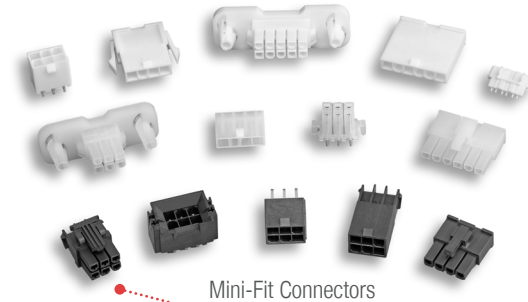
### Self-aligning interface

Enables operator to mate connectors in hard-to-reach areas



### Backshell option available

Secures cable. Provides strain relief



Mini-Fit Connectors

### Receptacles and plugs accept both standard Mini-Fit and Mini-Fit Plug crimp terminals

Reduces the number of parts to be purchased and inventoried

### Positive locking housings

Assures connectors are fully mated with easy-to-operate thumb latch. Helps to prevent accidental unmating



Mini-Fit Plus Connectors

### Select series offer up to 1,500 mating cycles with gold terminals; standard series support 100 mating cycles with gold-plated terminals; 75 mating cycles with tin-plated terminals

Ideal for applications requiring a high number of mating cycles

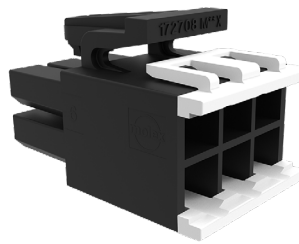
### Blind-mating interface

Allows 2.54mm misalignment in x and y axis for all configurations



### Panel mount and vertical header options

Maintains current-rating through application surfaces or panels



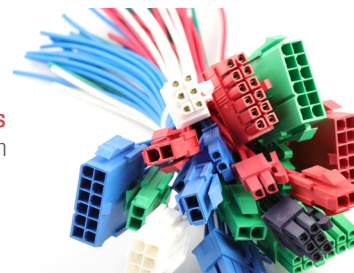
Mini-Fit Sigma Connector

### Terminal position assurance (TPA) with secondary locking feature

Reduces assembly errors and helps to ensure terminals are fully seated to avoid end-product failure

### Visual color pairing (colors can be intermated)

Reduces assembly errors and helps to ensure terminals are fully seated to avoid end-product failure



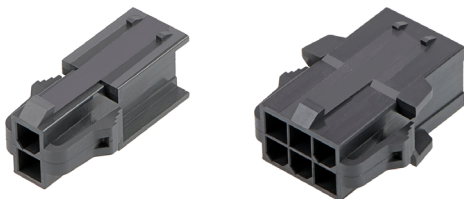
### Robust latch design

Provides superior retention

Mini-Fit Versa Color Connectors

### V-0 Glow Wire combination resin

Reduces the cost of materials and labor and allows customers to meet the European standard for electrical requirements



Mini-Fit Sigma Plugs

# Mini-Fit Connector Family



## Applications

### Automotive

- Harness manufacturers
- Inside devices
- Non-sealed applications

### Commercial Vehicle

- Electronic control modules

### Consumer

- Gaming equipment
- Gaming machines
- Vending machines

### Data/Communications

- Copiers
- Printers

### Home Appliance

- White goods

### Industrial

- Industrial equipment
- Power suppliers

### Industrial Automation

- Automation equipment
- Food and beverage dispensers

### Medical

- Medical devices
- X-rays

### Telecommunications/Networking

- Backplanes
- Fan-tray assemblies
- Rack-mount servers
- Routers
- Servers
- Switches



Office Equipment



Industrial Automation



Vending Machines

## Specifications

### REFERENCE INFORMATION

- Packaging: Reel, Bag or Tray
- UL File No.: E29179
- CSA File No.: LR19980
- Mates with: Other Mini-Fit and Mini-Fit Plus Housings
- Use With: Mini-Fit and Mini-Fit Plus Terminals
- Designed In: Millimeters
- RoHS: Yes
- Halogen Free: Yes, some series
- Glow Wire Capable: Yes, some series

### ELECTRICAL

- Voltage (max.): 600V AC/DC
- Current (max.): 9.0A (Mini-Fit); 13.0A (Mini-Fit Plus), 11.5A (Mini-Fit Sigma), 11.5A (Mini-Fit Versa Color)
- Contact Resistance (max.): 10 milliohm
- Dielectric Withstanding Voltage: 2200V AC
- Insulation Resistance (min.): 1000 Megohms

### MECHANICAL

- Contact Insertion Force (max.): 15N
- Contact Retention to Housing (min.): 30N
- Insertion Force to PCB (max.): 98N
- Mating Force (max.): 14.7N
- Unmating Force (max.): 1N
- Durability (min.): 75 Cycles (Tin); 100 Cycles (Gold), 1,500 for select options (Gold)

### PHYSICAL

- Flammability: UL 94V-0
- Housing: Nylon
- Plating:
  - Contact Area – Tin (Sn) or Gold (Au)
  - Tail Area – Tin (Sn)
  - Underplating – Nickel (Ni)
- PCB Thickness: Multiple Options
- Operating Temperature: -40 to +105°C

[www.molex.com/link/minifit.html](http://www.molex.com/link/minifit.html)

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