Mini-Fit Connector Family

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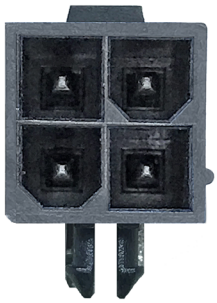
The Mini-Fit Connector Family delivers up to 13.0A, while blind-mating and terminal position assurance options provide a versatile connector system for a wide range of applications

Features and Advantages

Fully isolated terminals
Protect against potential damage during handling

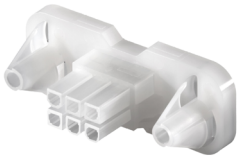


Polarized mating geometry
Ensures header and receptacle cannot be mismated

Crimp terminals are produced from a proprietary, high-current alloy
Rated up to 13.0A per circuit

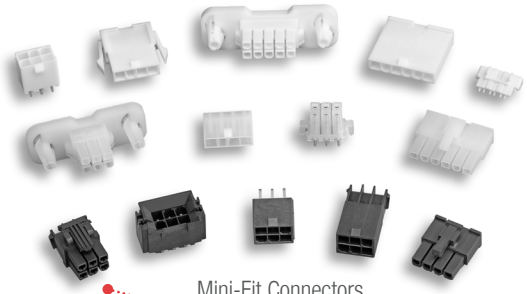
Terminals feature a patented, elongated dimple design
Provide long wipe lengths and increased contact area for improved long-term reliability

Self-aligning interface
Enables operator to mate connectors in hard-to-reach areas



Backshell option available
Secures cable. Provides strain relief

Mini-Fit Sigma Plugs



Mini-Fit Connectors

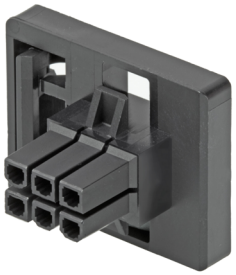
Receptacles and plugs accept both standard Mini-Fit and Mini-Fit Plug crimp terminals
Reduces the number of parts to be purchased and inventoried

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

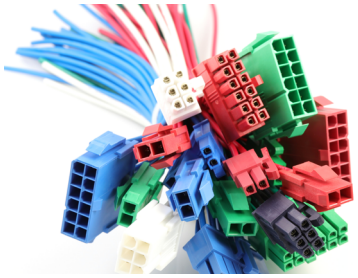


Terminal position assurance (TPA) with secondary locking feature
Reduces assembly errors and helps to ensure terminals are fully seated to avoid end-product failure

Mini-Fit Sigma Connector

Panel mount and vertical header options
Maintains current-rating through application surfaces or panels

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

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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

Order No. 987651-8272 Rev. 3 USA/0k/GF/2021.01