

# 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



Crimp terminals

a proprietary,

per circuit

are produced from

high-current alloy

Rated up to 13.0A

# Polarized mating geometry

Helps ensure header and receptacle cannot be mismated



# Terminals feature a patented, elongated dimple design

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



Mini-Fit Connectors

## Mini-Fit Plus Connectors

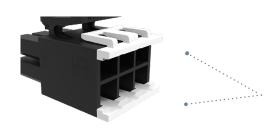


# **Self-aligning interface**

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



Maintain current-rating through application surfaces or panels



Mini-Fit Sigma Connector

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

Reduce the number of parts to be purchased and inventoried

#### **Positive locking housings**

Help ensure connectors are fully mated with easy-tooperate thumb latch. Helps to prevent accidental unmating

# 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 Connector Family >

#### **Backshell option available**

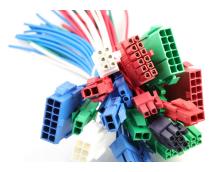
Secures cable. Provides strain relief



Mini-Fit Sigma Plugs

# Panel mount and vertical header options

Maintain current-rating through application surfaces or panels



Mini-Fit Versa Color Connectors

# 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

### 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 FIP Hybrid Connector

# **APPLICATIONS**

#### **Automotive**

Harness manufacturers Inside devices Non-sealed applications

## **Commercial Vehicle**

#### Industrial

Industrial equipment Power suppliers

#### **Industrial Automation**

Automation equipment Electronic control modules Food and beverage dispensers

#### Consumer

Gaming equipment Gaming machines Vending machines

## **Data/Communications**

Copiers **Printers** 

# **Home Appliance**

White goods

# Medical

Medical devices X-rays

# **Telecommunications/Networking**

**Backplanes** 

Fan-tray assemblies Rack-mount servers

Routers Servers **Switches** 



Office Equipment



Industrial Automation



Vending Machines



# Mini-Fit Connector Family >

# **SPECIFICATION**

#### **Reference Information**

Packaging: Reel, Bag or Tray UL File No.: E29179

CSA File No.: E29179

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