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# Micro-Fit+ Connector System >

The Micro-Fit+ Connector System offers high current capability for space-constrained applications, with a variety of configurations and a 40% reduced mating force for enhanced ergonomics and assembly efficiency. Our Micro-Fit+ PCIe Connectors offer full PCIe CEM specification compliance in a compact, space-saving design with hybrid power and signal integration.

### **ADVANTAGES AND FEATURES**

Helps prevent potential arcing due to fully isolated contacts on each side of the interface

Allows customers to meet the European standard for electrical requirements due to V-0/Glow Wire combination resin

**Provides stability and security for the terminals inside the receptacle** with enhanced Terminal Position Assurance (TPA) design

Helps prevent mis-mating as a result of unique keying design

Offers PCB design flexibility and improved strength and reliability as a result of unique keying design with clip and nail SMT options

Current (max.)	13.0A
Pitch	3.00mm
Operating temperatures	-40 to 105°C
Voltage (max.)	600V

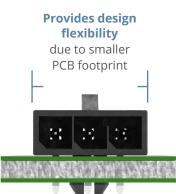
Reduces labor costs, saves time and resources with reflow-capable options available

Allows for ease of work, reducing operator fatigue during assembly with its unique design

because of the 40% reduced mating force

## Helps ensure proper mating orientation

with fully polarized housings (not compatible with standard Micro-Fit 3.0 Connectors)













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## ADVANTAGES AND FEATURES Micro-Fit+ PCIe 12V-2x6 Connectors

# Supports ampere interrupting capacities (AICs) up to 675W

with 9.5A per pin; hybrid 12-power + 4-signal pin design utilizes high-current alloy for power pins

#### **Complies with industry standards**

due to conformance with PCIe CEM 5.0/6.0 specifications and Molexengineered reliability





## **APPLICATIONS**

#### Consumer

Copiers Freezers Pinball and slot machines 3D printers Refrigerators Vending machines Video poker and pachinko equipment Washing machines

#### **Medical**

Diagnostic equipment Patient monitors

## Sustainable Energy

Solar power

#### Telecommunications/ Networking

Routers and switches Servers High-speed compute and storage systems Graphics and gaming systems Internet of Things (IoT) Data centers High-performance computing equipment Artificial intelligence/machine-learning systems Virtual reality

#### Automotive

Telemetrics Non-critical applications





High-Speed Compute and Routers

Appliances



Diagnostic Equipment

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#### **SPECIFICATIONS**

### Micro-Fit+ Connector System

#### **Reference Information**

Packaging: Bag, tray, reel UL File No.: E29179 CSA File No.: LR19980 Mates With: Series: 206832 Series: 206461 Series: 215759 Series: 223794 USe With: Series: 206460 Series: 206462 Series: 206461 Series: 206462 Terminal Used: Series: 206460 Designed In: Millimeters RoHS: Yes Halogen Free: Yes Glow Wire Capable: Yes

#### **Electrical**

Voltage (max.): 600V AC (RMS) or DC Current (max.): 13.0A Contact Resistance: 10 milliohms maximum Dielectric Withstanding Voltage: No breakdown; current leakage < 5mA Insulation Resistance: 1000 megohms minimum

#### **Mechanical**

Pitch: 3.00mm
Contact Insertion Force: 14.7N (3.3 lbf) Maximum insertion force
Contact Retention to Housing: 24.5N (5.5 lbf)
Insertion Force to PCB: 13.7N (3.1 lbf) Minimum retention force
Mating Force (max.): 7.0N per circuit Tin (Sn) 1.0N per circuit Gold (Au)
Unmating Force (min.): 1.4N per circuit Tin (Sn) 0.2N per circuit Gold (Au)

#### **Physical**

Housing: Glass filled liquid crystal polymer Contact: High Copper Alloy Plating: Gold (Au) or Tin (Sn) over Nickel overall PCB Thickness: Standard 1.57mm Operating Temperature: -40 to +105°C

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#### Micro-Fit+ PCIe 12V-2x6 Connectors

#### **Reference Information**

Series: 219116 Mates With: Series: 219114 Terminal Used: Series: 220226 Series: 219197

#### **Electrical**

Low Level Contact Resistance: Power Terminal: 5 mΩ Signal Terminal: 20 mΩ Insulation Resistance: 1000MΩ min. Voltage (max.): 600V AC/DC Current (max.): 9.5A (Power)/1A (Signal) Dielectric Withstand Voltage: 1500V AC Temperature Rise: 30°C ma Rated current up to 9.5 A per contact with all 12 power contacts energized 4 signal contacts rated to 1.0A Fully isolated terminals Positive locking on housing with low thumb latch operation

#### **Physical**

Header: Liquid crystal polymer, UL 94V-0, black Header Pin: High Copper Alloy (Cu), Tin (Sn) plating Receptacle: Nylon, UL 94V-0, low halogen, black Power Terminal: High-current Cu alloy Signal Terminal: Phosphorous Bronze

#### www.molex.com/link/microfitplus.html