

> 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.

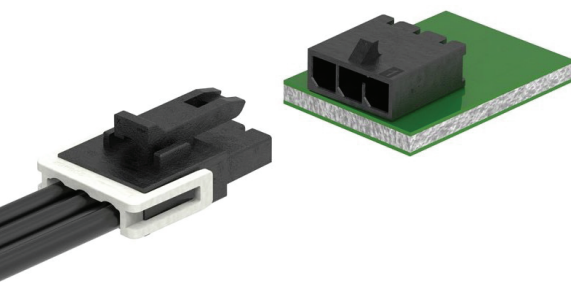
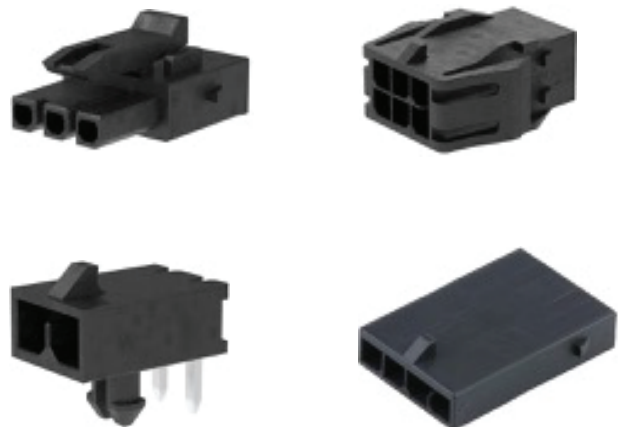
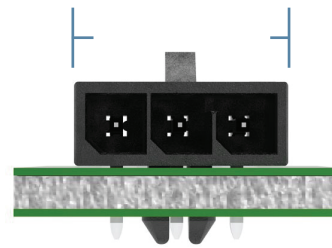
Reduces labor costs, saves time and resources with reflow-capable options available.

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).

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

Provides design flexibility due to smaller PCB footprint.



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.

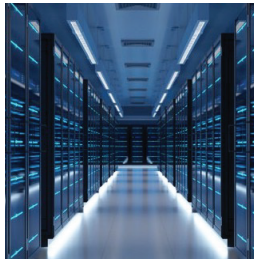
Compiles with industry standards due to conformance with PCIe CEM 5.0/6.0 specifications and Molex-engineered reliability.



APPLICATIONS

CONSUMER

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



High-Speed Compute and Routers



Appliances



Diagnostic Equipment

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

- Telematics
- Non-critical applications

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: 206461

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

Micro-Fit+ Connector System

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.): 600 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.heilind.com/microfitplus

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