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Delivering up to 13.0A, the Mini-Fit® Plus 4.20mm pitch connector system increases power delivery for high-current applications in virtually any industry without increasing design footprints

The Mini-Fit® Plus system offers a high-current, power-dense, mid-range power connection system. The Mini-Fit Plus system leverages the same housings, PCB footprint and application tooling as Mini-Fit Jr.™ and Mini-Fit BMI systems. With the launch of the Mini-Fit Plus high-conductive terminal, customers can increase power carrying capabilities while leveraging the extensive Mini-Fit Jr.™ product portfolio.

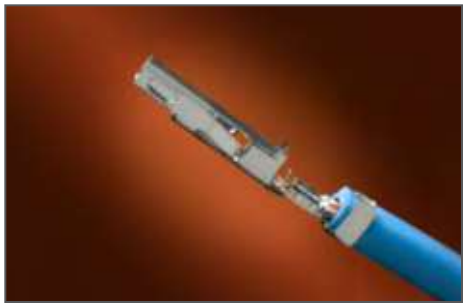
The Mini-Fit Plus system consists of crimp terminals, headers and PCB receptacles; 13.0A per circuit can be achieved using 16 AWG wire. Mini-Fit Plus terminals can be used with all existing Mini-Fit plug and receptacle housings. In addition, all standard Mini-Fit right-angle headers (Series 5569, 42404, 43810, 46991) are inherently Mini-Fit Plus compatible, as they feature a solid-pin construction which is designed to handle high current.

Features and Benefits

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
Mini-Fit® Plus terminals are used in existing Mini-Fit Jr.™ header housings and Mini-Fit receptacles and plugs	Leverages the extensive features already offered by the Mini-Fit product portfolio
Crimp terminals are compatible with existing Molex crimp tooling	No new application tooling is required
Advanced crimp design	Meets the latest industry requirement A620 as defined by the Institute of Printed Circuits and the Wiring Harness Manufacturers Association
Select series offer up to 1500 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
Select color options include white and black	To differentiate between multiple harness connections

Mini-Fit® Plus Connector System 4.20mm Pitch

45750	Female Crimp Terminal
46012	Male Crimp Terminal
46018	Female High-Cycle Crimp Terminal
46014	Single-Row Vertical Header
46015	Dual-Row Vertical Header
46011	Dual-Row Vertical BMI Header
46010	Dual-Row Vertical Board Receptacle



Mini-Fit® Plus Female Terminal



Mini-Fit® Plus Receptacle



Mini-Fit® Plus Header

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Mini-Fit® Plus Connector System 4.20mm Pitch

Specifications

Reference Information
Packaging:
  Terminal: Reel or bag
  Header: Tray
UL File No.:E29179
CSA File No.:LR19980
Mates With: Other Mini-Fit Plus series
Use With: Mini-Fit Jr.™ Housings
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes – some series
Glow Wire Compliant: Yes – some series

Electrical
Voltage (max.): 600V
Current (max.): 13.0A
Contact Resistance (max.):
  10 milliohm
Dielectric Withstanding Voltage:
  2200V AC
Insulation Resistance (min.):
  1000 Megohms

Mechanical
Contact Insertion Force (max.): 4.9N
Contact Retention to Housing (min.):
  30.0N
Insertion Force to PCB (max.): 98.0N
Mating Force (max.): 4.5N per circuit
Unmating Force (max.): 4.0N
Durability (min.):
  Tin — 75 cycles;
  Gold — 100 cycles, 1500 cycles for select options

Physical
Housing: Nylon
Contact:
  High-Current Copper (Cu) Alloy
Plating:
  Contact Area — 100µ" Tin (Sn) or 30µ" Gold (Au) Solder
  Tail Area — 100µ" Tin (Sn)
  Underplating — 50µ" Nickel (Ni)
PCB Thickness: Multiple options
Operating Temperature:
  -40 to +105°C

Product Features



Patented, elongated contact design

Applications

Consumer – White Goods
  – Washers and dryers
  – Refrigerators and freezers
  – Copiers and printers
  – Vending and gaming
  – Pinball and slot machines
  – Video poker and pachinko

Telecommunications
  – Hubs and routers
  – Power supplies and distribution
  – Servers and backplanes

Medical
  – X-ray machines

Commercial Vehicle
  – Electronic control modules

Industrial (General)
  – Food and beverage dispensers



Server and Storage Room



Laundry Equipment (washers and dryers)

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Mini-Fit® Plus Connector System 4.20mm Pitch

Ordering Information - Wire-to-Board

Terminals

Order No.	Gender	Wire Range (AWG)	Base Material	Plating	Packaging
45750-1111	Female	18 to 20	Copper	Tin	Reel
45750-3111		16			
45750-1211		18 to 20		Gold	
45750-3211		16			

Receptacles

Order No.	Rows	Circuits	Resin	Flammability	Packaging
39-01-4XX1	Single	3 to 5	Nylon	UL 94V-0	Bag
39-01-4XX0				UL 94V-2	
39-01-2XX5	Dual	2 to 24		UL 94V-0	
39-01-2XX0				UL 94V-2	

Headers

†Order No.	Rows	Plating	Circuits	Flammability	PCB Processing	Packaging
46014-XX04	Vertical, Single	Tin	3 to 5	UL 94V-0	Wave Solder	Tray
46014-XX06		Gold				
46014-XX05		Tin		UL 94V-2		
46015-XX03	‡Vertical, Dual	Gold	2 to 24	UL 94V-0		
46015-XX09		Tin				
46015-XX07		Gold		UL 94V-2		
39-30-3XX2	‡Right Angle, Single	Tin	3 to 5	UL 94V-0		
39-30-3XX3		Gold				
39-30-3XX5		Tin		UL 94V-2		
39-29-1XX7	‡Right Angle, Dual	Gold	2 to 24	UL 94V-0		
39-30-0XX0		Tin				
39-28-1XX8		Gold		UL 94V-2		

† Replace XX with number of circuits required. For example, if an 8-circuit part is required, insert 08.
‡ Right-angle single and dual-row headers are standard 5569 series; solid pins carry higher current

Ordering Information - Wire-to-Wire

Terminals

Order No.	Gender	Wire Range (AWG)	Base Material	Plating	Packaging
45750-1111	Female	18 to 20	Copper	Tin	Reel
45750-3111		16			
45750-1211		18 to 20		Gold	
45750-3211		16			
46012-1141	Male	16		Tin	
46012-3141		18 to 20			
46012-3241		16		Gold	
46012-1240		18 to 20			

Receptacles

Order No.	Rows	Circuits	Resin	Flammability	Packaging
39-01-4XX1	Single	3 to 5	Nylon	UL 94V-0	Bag
39-01-4XX0				UL 94V-2	
39-01-2XX5	Dual	2 to 24		UL 94V-0	
39-01-2XX0				UL 94V-2	

Plugs

†Order No.	Rows	Circuits	Resin	Flammability	Packaging
39-01-4XX7	Free-Hanging, Single	3 to 5	Nylon	UL 94V-0	Bag
39-01-4XX6				UL 94V-2	
39-01-2XX9	Free-Hanging, Dual	2 to 24		UL 94V-0	
39-01-2XX3				UL 94V-2	
39-01-4XX3	Panel-Mount, Single	3 to 5		UL 94V-0	
39-01-4XX2				UL 94V-2	
39-01-2XX6	Panel-Mount, Dual	2 to 24		UL 94V-0	
39-01-2XX1				UL 94V-2	

† Replace XX with number of circuits required. For example, if an 8-circuit part is required, insert 08.

www.molex.com/link/minifit.html

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