

Mega-Fit Power Connectors, 5.70mm Pitch

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Mega-Fit Power Connectors deliver 23.0A per circuit through fully protected header pins and receptacle terminals while offering unique keying options to ensure proper mating during termination

Features and Benefits

Power-dense design with high-current terminals, tight pitch and row spacing

Provides more power per linear and square millimeter than other mid-range power products in the industry

Positive locking housing

Ensures secure retention when receptacle and header are mated. Delivers an audible click to provide feedback that connector is fully mated

Tin-plated contacts available

Enhances design flexibility. Provides significant cost savings

Sacrificial contacts

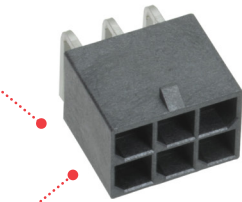
Allows system to be "hot plugged" at 48V/23.0A up to 30 cycles

Extended barrel conductor crimp

Provides extremely strong terminal-to-wire retention for long-term reliability

Fully isolated header pins and receptacle terminals

Protects against potential damage during handling and mating



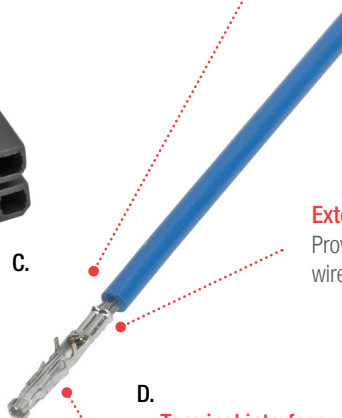
B.



C.



A.



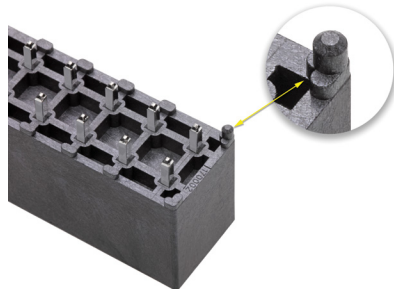
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Mega-Fit Power Connector Family

- A. Vertical Header (Series 172065, 76829)
- B. Right-Angle Header (Series 172064, 76825)
- C. Receptacle (Series 171692, 170001)
- D. Female Crimp Terminal (Series 172063, 76823)

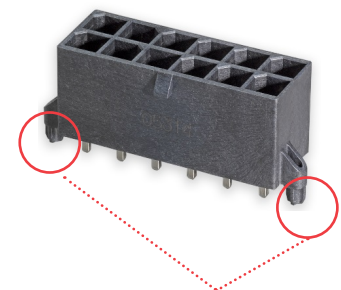
Terminal interface with six independent points of contact (split-box terminal design)

Offers redundant, secondary current paths for long-term performance and reliability



Polarization peg to engage with PCB

Replaces the crush pegs to provide stability without taking up room on the PCB. Aids assembly by ensuring correct orientation



Crush peg removal

Delivers a smaller footprint on the PCB

Applications

Home Appliance

Washers and Dryers
Heaters and Air Conditioners

Telecommunication/Networking

Hubs and Servers
Power Supplies and Distribution

Industrial

Machinery and Heavy Equipment
Lighting and Automation

Commercial Vehicle

Unsealed Electronic Control Modules
Power Converters



Consumer Appliances



Industrial Machinery

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Specifications

REFERENCE INFORMATION

Packaging: Bag, Reel, Tray
UL File No.: E29179
CSA File No.: LR-19980_A_000
Mates With: Mega-Fit Receptacles
Use With: Mega-Fit Receptacles
Terminal Used: Series 172063, 076823
Designed In: Millimeters
RoHS: Yes, Compliant Materials
Halogen Free: Yes or No
Glow Wire Compliant: Yes

ELECTRICAL

Voltage (max.): 600V
Current (max.): 23.0A
Contact Resistance: 6 Milliohms
Dielectric Withstanding Voltage: No breakdown
Current leakage <5mA
Insulation Resistance (min.): 1,000 Megohms

MECHANICAL

Contact Insertion Force (max.): 6.8N
Contact Retention to Housing: 30N
Insertion Force to PCB (max.): 85N
Mating Force: Tin plated (max.):
6.8N initial mating force per circuit
0.36 or 0.78μ (15 or 30μ") Gold plated (max.):
6.0N per circuit
Unmating Force: Tin plated (max.):
6.5N initial unmating force per circuit
0.36 or 0.78μ (15 or 30μ") Gold plated (max.):
5.6N per circuit
Durability (min.): Maximum change from initial:
Tin: 2 Megohms; Gold: 2 Megohms
Header Pin Retention Force in Housing
Vertical Header: 89N min per pin

PHYSICAL

Housing: UL 94 V-0, Glow-Wire and Low-Halogen
Contact: High-Conductivity Copper
Plating:
Contact Area: Gold (Au) 0.36 or 0.78μ (15 or 30μ")
options or Tin (Sn)
Solder Tail Area: Tin (Sn)
Underplating — Nickel (Ni)
PCB Thickness: 1.60 and 2.40mm (.062 and .093")
Operating Temperature: -40°C to 105°C

Ordering Information

Series No.	Component	Orientation	Plating	Flammability Rating
171692	Receptacles	Straight	---	UL 94 V-0
170001				Glow-Wire
172064	Headers	Right-Angle	Gold	UL 94 V-0 and Glow-Wire
76825			Tin	
172065		Vertical	Gold	
76829			Tin	
76829			Tin	
172065			Gold	
200122	Standard and Glow-Wire Dual-Row Backshell Half	—	—	
		Wire Size - AWG	Wire Size - Metric	Base Material
172063	Crimp Terminals	12, 14 or 16 AWG	1.50, 2.50 or 4.00mm ²	Copper Alloy
76823				

www.molex.com/link/megafit.html

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