

# Mega-Fit™ Power Connectors

## 5.70mm Pitch

molex®

Delivering cutting-edge current density at 23.0A per circuit through a split-box terminal design, Mega-Fit™ Power Connectors incorporate the option for tin-plated contacts to enhance design flexibility while providing significant cost savings

### 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 midrange power products in the industry
Terminal interface with six independent points of contact (split-box terminal design)	Offers redundant, secondary current paths for long-term performance and reliability
Tin-plated contacts now available	Enhances design flexibility. Provides significant cost savings
Extended barrel conductor crimp	Provides extremely strong terminal-to-wire retention for long-term reliability
Sacrificial contacts	Allows system to be "hot plugged" at 48V/23.0A up to 30 cycles
Fully isolated header pins and receptacle terminals	Protects against potential damage during handling and mating
Positive locking housing	Ensures secure retention when receptacle and header are mated. Delivers an audible click to provide feedback that connector is fully mated
Backshells available in 94V-0-compliant and Glow-Wire-capable materials	Affords application flexibility. Provide strain relief
Hermaphroditic two-piece backshell	Makes assembly and stocking easy; reduces bill-of-materials (BOM)



Mega-Fit™ Wire-to-Board Vertical Connector

### Applications

#### Consumer / Home Appliance

Washers and Dryers  
Heaters and Air Conditioners

#### Networking and Telecommunication

Hubs and Servers  
Power Supplies and Distribution

#### Industrial

Machinery and Heavy Equipment  
Lighting and Automation

#### Commercial Vehicle

Unsealed Electronic Control Modules  
Power Converters

### Specifications

#### REFERENCE INFORMATION

UL File No.: E29179  
CSA File No.: LR19980  
IEC: 1400024  
RoHS: Yes  
Halogen Free: Headers  
Glow Wire Compliant:  
Yes, receptacles (series 170001) and backshells (series 200122)  
VDE Approval

#### MECHANICAL

Contact Retention to Housing: 30N  
Mating Force (max.):  
6N per circuit, Gold (Au) / 6.8N Tin (Sn)  
Unmating Force (max.):  
5.6N per circuit, Gold (Au) / 6.5N Tin (Sn)  
Durability (max.):  
200 mating cycles, Gold (Au) / 25 cycles, Tin (Sn)  
Wire Pull-Out Force (min.):  
12 AWG / 4.00mm<sup>2</sup>: 220N

#### PHYSICAL

Header:  
UL 94 V-0, Glow Wire, Low Halogen compliant  
Contact: High-conductivity Copper  
Plating: Contact Area -  
Gold (Au) 30u" and 15u" options or Tin (Sn)  
Solder Tail Area - Tin (Sn)  
Underplating - Nickel (Ni)  
PCB Thickness: 1.60 and 2.40mm (.062 and .093")  
Operating Temperature 105°C (max):

#### ELECTRICAL

Voltage (max.): 600V  
Current (max.): 23.0A  
Contact Resistance (max. change): 6 milliohms  
Current Interrupt Rating: 48V AC/DC,  
23.0A max. up to 30 mate and un-mate cycles

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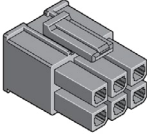


### Ordering Information

#### TERMINALS

	Description	Packaging	Base Material	Plating	Wire Range AWG	Wire Range Metric	Series
	Female Crimp Terminal	Reel	Copper Alloy	Tin	14 to 16AWG	1.5mm <sup>2</sup>	<a href="#">76823</a>
					12AWG	2.5mm <sup>2</sup> to 4.0mm <sup>2</sup>	
				15μ" Gold	14 to 16AWG	1.5mm <sup>2</sup>	<a href="#">172063</a>
					12AWG	2.5mm <sup>2</sup> to 4.0mm <sup>2</sup>	
					14 to 16AWG	1.5mm <sup>2</sup>	
						12AWG	

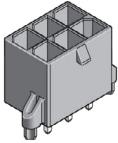
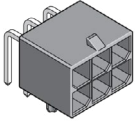
#### RECEPTACLE

	Description	Resin	Packaging	Flammability	Circuits	Series
	Standard Dual Row Receptacle	PBT	Bag	94V-0	2-12	<a href="#">171692</a>
	Glow Wire Dual Row Receptacle	Nylon		Glow Wire per IEC 60335-1	2-12	<a href="#">170001</a>

#### BACKSHELL

	Description	Resin	Packaging	Flammability	Circuits	Series
 Note: Two pieces required. The halves are hermaphroditic.	Standard Dual Row Strain Relief Backshell Half	Nylon	Bag	94V-0	2-12	<a href="#">200122</a>
	Glow Wire Dual Row Strain Relief Backshell Half			Glow Wire per IEC 60335-1	2-12	

#### HEADERS

	Description	Flammability	PCB Processing	Packaging	Plating	Circuits	Series
	Through-hole Vertical Header	94V-0 and Glow Wire per IEC 60335-1	260°C Max Thru-hole Wave and Reflow	Tray	Tin	2-12	<a href="#">76829</a>
					15μ" Gold		<a href="#">172065</a>
					30μ" Gold		
	Through-hole Right Angle Header	94V-0 and Glow Wire per IEC 60335-1	260°C Max Thru-hole Wave and Reflow	Tray	Tin	2-12	<a href="#">76825</a>
					15μ" Gold		<a href="#">172064</a>
					30μ" Gold		

[www.molex.com/link/megafit.html](http://www.molex.com/link/megafit.html)