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 Networking and Telecommunication		Industrial	Commercial Vehicle	
Washers and Dryers	Hubs and Servers	Machinery and Heavy Equipment	Unsealed Electronic Control Modules	
Heaters and Air Conditioners	Power Supplies and Distribution	Lighting and Automation	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

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

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 / 4.00mm²: 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):

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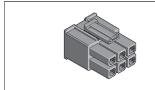


Ordering Information

TERMINALS

	Description	Packaging	Base Material	Plating	Wire Range AWG	Wire Range Metric	Series
Female Crimp Terminal			Copper Alloy	Tin	14 to 16AWG	1.5mm²	76823
					12AWG	2.5mm² to 4.0mm²	
	Female			15μ" Gold	14 to 16AWG	1.5mm²	- <u>172063</u>
	Crimp Terminal				12AWG	2.5mm² to 4.0mm²	
				30µ" Gold	14 to 16AWG	1.5mm²	
					12AWG	2.5mm² to 4.0mm²	

RECEPTACLE



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

BACKSHELL



Description	Resin	Packaging	Flammability	Circuits	Series
Standard Dual Row Strain Relief Backshell Half	Nylon	Bag	94V-0	2-12	200122
Glow Wire Dual Row Strain Relief Backshell Half			Glow Wire per IEC 60335-1	2-12	200122

HEADERS

	Description	Flammability	PCB Processing	Packaging	Plating	Circuits	Series
	Through halo Vertical	94V-0	260°C Max		Tin		<u>76829</u>
	Through-hole Vertical Header	and Glow Wire per IEC 60335-1	Thru-hole Wave and Reflow	Tray	15μ" Gold	2-12	172065
		per IEO 00333-1	C 60335-1 RETIOW		30μ" Gold		172003
	Through hala Dight	94V-0	260°C Max Thru-hole Wave		Tin		<u>76825</u>
Angle Header	Through-hole Right Angle Header	and Glow Wire per IEC 60335-1	and Reflow	id Iray	15μ" Gold	2-12	470004
					30μ" Gold		<u>172064</u>

www.molex.com/link/megafit.html