molex

Mega-Fit Power Connectors deliver cutting-edge current density at 23.0A per circuit; terminals provide six independent contact points for long-term reliability in virtually every industry and application

Feature and Benefits

Power-dense design with high- current terminals, tight pitch and row spacing	Provides one of the highest current- density options compared to existing mid-range power connectors
Terminal interface with six independent points of contact (split-box terminal design)	Offers redundant, secondary current paths for long-term performance and reliability
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

Mega-Fit Power Connectors 5.70mm Pitch

172063 Crimp Terminals,

Gold

171692 Receptacle, 94 V-0

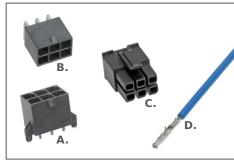
170001 Receptacle, Glow-Wire

172064 Right-Angle

Headers, Gold

172065 Vertical Headers,

Gold



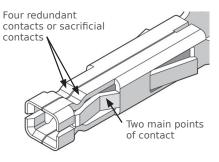
Mega-Fit Power Connector Family

- A. Vertical Header, Gold
- B. Right-Angle Header, Gold
- C. Receptacle
- D. Female Crimp Terminal, Gold

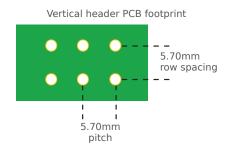
Product Features

Premium housing features Positive lock Fully isolated terminals Polarizing and retention pegs

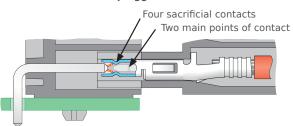
Six independent points of contact



Power Density — 23.0A per contact



Hot pluggable



The female terminal has four sacrificial contacts to attract arcing and protect the two main points of contact when unmating the connector while the system is under full power

Current interupt rating at UL for 48V at 23.0A



Specifications

Reference Information

UL File No.: E29179 CSA File No.: LR19980

IEC: 1400024 RoHS: Yes

Halogen Free: Headers only Glow Wire Compliant: Yes, some options

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.):

5.6N per circuit, Gold (Au)
Unmating Force (max.):
5.6N per circuit, Gold (Au)

Durability (max.):

200 mating cycles, Gold (Au) Wire Pull-Out Force (min.): 12 AWG / 4.00mm²: 220N

Mega-Fit Power Connectors 5.70mm Pitch

Physical

Header:

UL 94 V-0, glow-wire

Contact:

High-conductivity copper

Plating:

Contact Area —

Gold (Au) 30u" and 15u" options

Solder Tail Area — Tin (Sn) Underplating — Nickel (Ni)

PCB Thickness:

1.60 and 2.40mm (.062 and .093") Operating Temperature (max.):

-40 to +120°C

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

Documentation

Product Specification	PS-76823-100	
Application Specification	AS-76823-100	
Application Tooling Specification	ATS-63902-3400 ATS-63902-3300	
Test Summary	TS-76823-100	

Ordering Information

Receptacles

Series No. Circuit Identification		Packaging	Flammability Rating
171692	Yes	Bag	UL 94 V-0
<u>170001</u>	ies		Glow-Wire

Headers

Series No.	Orientation	Packaging	Flammability Rating
<u>172064</u>	Right-Angle	Trav	UL 94 V-0
<u>172065</u>	Vertical	Tray	Glow-Wire

Terminals

Series No.	Base Material	Plating	Wire Size (AWG Metric)	Packaging
<u>172063</u>	Copper Alloy	Gold	12, 14 or 16 1.50, 2.50 or 4.00mm²	Reel

Application Tooling

Terminal	Wire Size	FineAdjust™ Applicator	Hand Crimp Tool	Terminal Extraction Tool
172063-0312	12 AWG	63003 3400	63825-7100 AWG only	63824-0800
172063-1312	2.50 & 4.0mm ²	63902-3400		
172063-0311	14 to 16 AWG	63902-3300		
172063-1311	1.5mm²	03902-3300		

www.molex.com/link/megafit.html