### **Mega-Fit**<sup>™</sup> **Power Connectors**

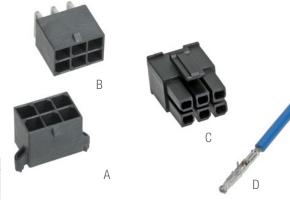
5.70mm Pitch

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 mid-range 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



# 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)

#### **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** 



Washers and Dryers



Servers



Heaters and Air Conditioners

## **Mega-Fit**<sup>™</sup> **Power Connectors**

5.70mm Pitch



#### **Specifications**

#### REFERENCE INFORMATION

UL File No.: E29179 CSA File No.: LR19980 IEC: 1400024 RoHS: Yes

Halogen Free: Headers only

Glow Wire Compliant: Yes, with 170001 series

receptacle, VDE approved

#### **MECHANICAL**

Contact Retention to Housing: 30N

Mating Force (max.): 5.6N per circuit (Gold), 6.8N (Tin) Unmating Force (max.): 5.6N per circuit (Gold), 6.5N (Tin) Durability (max.): 200 mating cycles (Gold), 25 cycles (Tin) Wire Pull-Out Force (min.): 12 AWG / 4.0mm²: 220N

#### **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

#### **PHYSICAL**

Material: LCP

Header: UL 94 V-0, Glow-Wire and Low-Halogen

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")

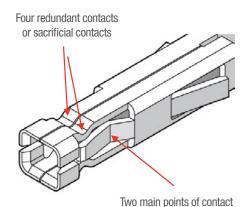
Operating Temperature (max.): Gold: -40 to +120°C Tin: -40 to +105°C

#### **ADDITIONAL PRODUCT FEATURES**

THE MOST POWER-DENSE MID-RANGE PRODUCT — 23.0A PER CONTACT

# Vertical header PCB footprint 5.70mm row spacing 5.70mm pitch

#### SIX INDEPENDENT POINTS OF CONTACT



#### **Ordering Information**

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

www.molex.com/link/megafit.html