# Mega-Fit Power Connectors, 5.70mm Pitch



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





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)

E. Blind-Mate Header (Series 204653)

#### 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-towire retention for long-term reliability



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



Fully isolated header pins and receptacle

terminals

mating

Protects against

potential damage

during handling and



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



# **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**

**Power Converters** 

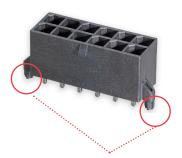
Unsealed Electronic Control Modules



Consumer Appliances



Industrial Machinery



Crush peg removal Delivers a smaller footprint on the PCB

# Mega-Fit Power Connectors, 5.70mm Pitch



# **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  $0.78\mu$  (15 or  $30\mu") Gold plated (max.):$ 

6.0N per circuit

Unmating Force: Tin plated (max.): 6.5N initial unmating force per circuit 0.36 or 0.78 $\mu$  (15 or 30 $\mu$ ") 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 0.78  $\mu$  (15 or  $30\mu$ ")

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
<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	
<u>76829</u>	- Slim Headers		Tin	
<u>172065</u>			Gold	
200122	Standard and Glow-Wire Dual-Row Backshell Half	_	_	
		Wire Size - AWG	Wire Size - Metric	Base Material
<u>172063</u>	- Crimp Terminals	12, 14 or 16 AWG	1.50, 2.50 or 4.00mm <sup>2</sup>	Copper Alloy
<u>76823</u>				