

# Mega-Fit Power Connectors, 5.70mm Pitch

**molex**

Mega-Fit Power Connectors deliver 26.0A per circuit through fully protected header pins and receptacle terminals while offering unique keying options to ensure proper mating during termination

## Features and Advantages

### 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

### 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/26.0A up to 30 cycles

### Tangleless terminal design

Reduce the risk of handling/transit damage

### Terminal interface with six independent points of contact (split-box terminal design)

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

### Fully isolated header pins and receptacle terminals

Protects against potential damage during handling and mating

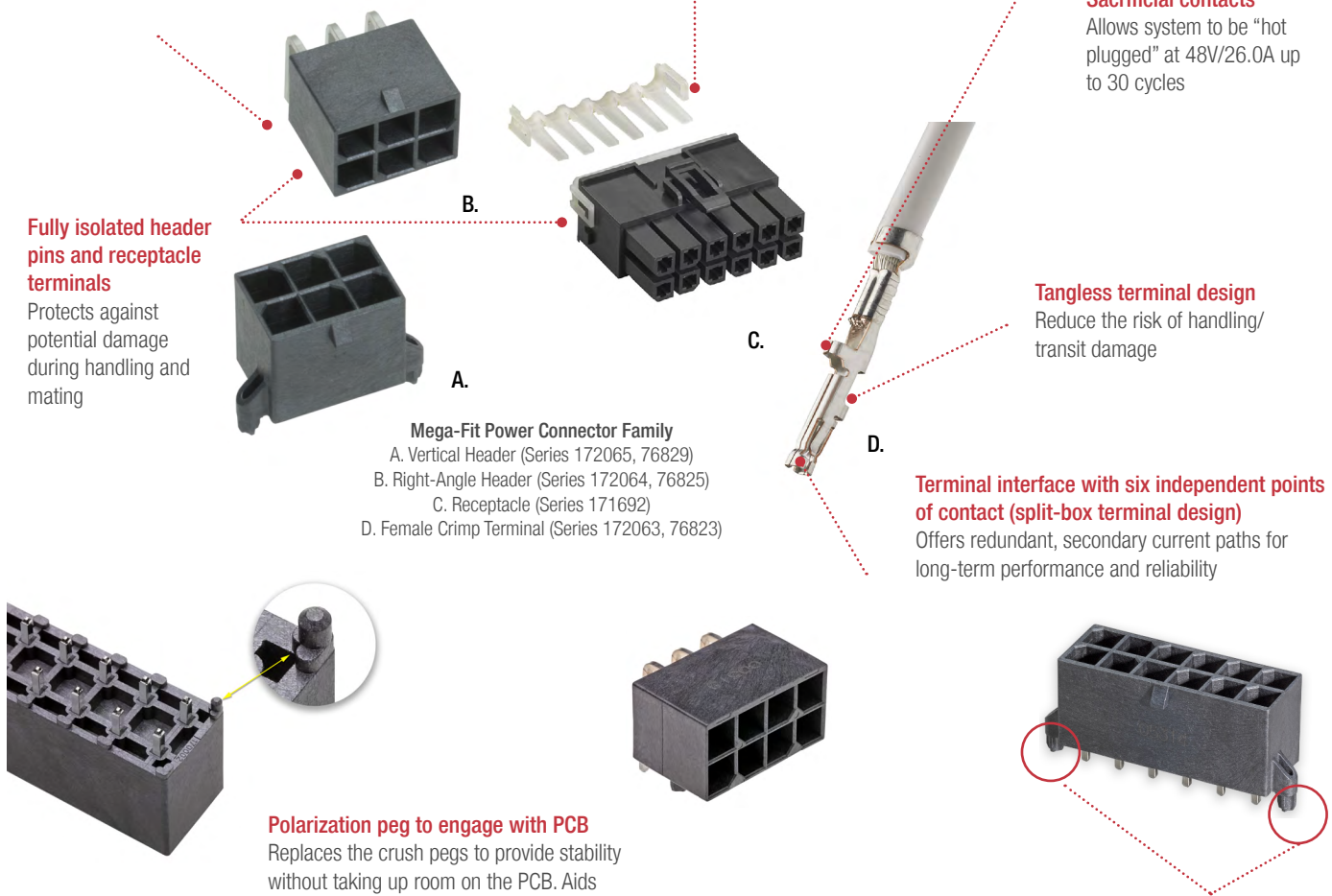
**Mega-Fit Power Connector Family**  
A. Vertical Header (Series 172065, 76829)  
B. Right-Angle Header (Series 172064, 76825)  
C. Receptacle (Series 171692)  
D. Female Crimp Terminal (Series 172063, 76823)

### Polarization peg to engage with PCB

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

### Crush peg removal

Delivers a smaller footprint on the PCB

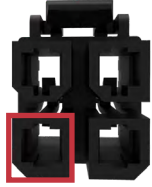


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## Features and Advantages

### Dual-Row W-to-W and Single-Row Systems



#### Polarizing and unique keying features

- Provide protection of the terminals in the receptacle
- Allow for compatibility with all current Mega-Fit Dual-Row headers
- Prevent electrical arcing when charged
- Avoids mis-mating of receptacles to header housings



#### TPA lead-in

Provides a guide and lead-in for the TPA on both the receptacle and plug



#### New latch design

Provides superior retention when mated to the header and allows for low-mating force



#### TPA

Prevents terminal backout

#### New housing material

Meets V0 and glow-wire European standards

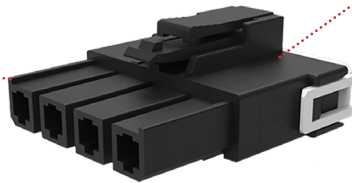


## Features and Advantages

### Single-Row

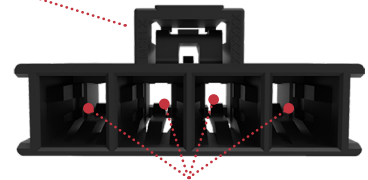
#### Fully isolated terminals

Protect against potential damage of header terminals during mating



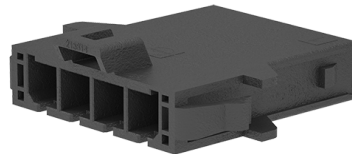
#### Inertia latch

Provides superior retention when mated to the header and allows for low-mating force



#### Internal receptacle locking mechanism

Supports the tangless locking terminal with low insertion force



## 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

Unsealed electronic control modules

Power converters



Consumer Appliances



Industrial Automation



Commercial Vehicles

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## Specifications

### REFERENCE INFORMATION

Packaging: Bag, Reel, Tray  
 UL File No.: Refer to Product Specification  
 CSA File No.: Refer to Product Specification  
 Mates With: Mega-Fit Receptacles, Plugs  
 Use With: Mega-Fit Receptacles, Plugs  
 Terminal Used: Series 172063, 076823, 105418, 105417  
 Designed In: Millimeters  
 RoHS: Yes, Compliant Materials  
 Halogen Free: Yes or No  
 Glow Wire Capable: Yes

Dual-Row Wire-to-Wire and Single-Row Systems  
 Mates With:  
 Single-Row HDR: 200456  
 Single-Row REC: 200241  
 TPA: 200456, 171692, 105412  
 Dual-Row Plug: 171692  
 Dual-Row HDR: 171692  
 Dual-Row REC: 105412, 76825, 76829, 172064, 172065  
 Male Terminal: 76823, 172063  
 Female Terminal: 105418, 105417

Use With:  
 Male Terminal: 105412  
 Female Terminal: 171692, 200456  
 TPA: 200456, 171692  
 Single-Row Receptacle: 76823, 105415  
 Dual-Row Receptacle: 76823, 105415  
 Single-Row Receptacle: 76823, 105415  
 Dual-Row Plug: 105418, 105415

### ELECTRICAL

Voltage (max.): 600V  
 Current (max.): 26.0A  
 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  
 0.38 or 0.76 $\mu$  (15 or 30 $\mu$ ) Gold plated (max.):  
 6.0N per circuit  
 Unmating Force: Tin plated (max.):  
 6.5N initial unmating force per circuit  
 0.38 or 0.76 $\mu$  (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 Combination  
 Contact: High-Conductivity Copper  
 Plating:  
 Contact Area: Gold (Au) 0.38 or 0.76 $\mu$  (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 to +150°C

## Ordering Information

### HEADER

Series No.	Component	Row	Circuits	Plating
<a href="#">76825</a>	Right Angle	Dual	2 to 12	Tin
<a href="#">76829</a>	Vertical			
<a href="#">172064</a>	Right Angle			Gold
<a href="#">172065</a>	Vertical			
<a href="#">200241-11XX</a>				
<a href="#">200241-12XX</a>	Right Angle	Single	2 to 8	Tin/Gold

### TERMINAL

Series No.	Type	AWG	Plating
<a href="#">76823</a>	Female	12 to 16	Tin
<a href="#">172063</a>			Gold
<a href="#">105417</a>	Male		Tin
<a href="#">105418</a>			Gold

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## Ordering Information

### RECEPTACLE

Series	Row	Circuits
<a href="#">171692</a>	Dual	2 to 12
<a href="#">200456</a>	Single	2 to 8

### PLUG

Series	Row	Circuits	Panel Mount
<a href="#">105411-01XX</a>	Dual	2 to 12	No
<a href="#">105411-11XX</a>			Yes
<a href="#">213814</a>	Single	2 to 8	Yes
<a href="#">213815</a>			No

### TPA (TERMINAL POSITION ASSURANCE)

Series	Circuits
<a href="#">105415</a>	2 to 8

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

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