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 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.

- **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.

- **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.

- **Tangless 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.

- **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.

**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 and Receptacle (Series 204653 and 204652)
Mega-Fit Power Connectors, 5.70mm Pitch

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 Machinery

Commercial Vehicles
### 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

**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
  - Female Terminal: 76823

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

**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 0.78μ (15 or 30μ”) Gold plated (max.):
- 6.0N per circuit

**Unmating Force:** Tin plated (max.):
- 6.5N initial unmating force per circuit
- 0.36 or 0.78μ (15 or 30μ”) 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) 0.36 or 0.78μ (15 or 30μ")
  - 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

**HEADER**

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Row</th>
<th>Circuits</th>
<th>Plating</th>
</tr>
</thead>
<tbody>
<tr>
<td>76825</td>
<td>Right Angle</td>
<td>Dual</td>
<td>2 to 12</td>
<td>Tin</td>
</tr>
<tr>
<td>76829</td>
<td>Vertical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172064</td>
<td>Right Angle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172065</td>
<td>Vertical</td>
<td></td>
<td></td>
<td>Gold</td>
</tr>
<tr>
<td>200241-11XX</td>
<td>Vertical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200241-12XX</td>
<td>Right Angle</td>
<td>Single</td>
<td>2 to 8</td>
<td>Tin/Gold</td>
</tr>
</tbody>
</table>

**TERMINAL**

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Type</th>
<th>AWG</th>
<th>Plating</th>
</tr>
</thead>
<tbody>
<tr>
<td>76823</td>
<td>Female</td>
<td>12 to 16</td>
<td>Tin</td>
</tr>
<tr>
<td>172063</td>
<td></td>
<td></td>
<td>Gold</td>
</tr>
<tr>
<td>105417</td>
<td>Male</td>
<td></td>
<td>Tin</td>
</tr>
<tr>
<td>105418</td>
<td></td>
<td></td>
<td>Gold</td>
</tr>
</tbody>
</table>
# Mega-Fit Power Connectors, 5.70mm Pitch

## Ordering Information

### RECEPTACLE

<table>
<thead>
<tr>
<th>Series</th>
<th>Row</th>
<th>Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>171692</td>
<td>Dual</td>
<td>2 to 12</td>
</tr>
<tr>
<td>200456</td>
<td>Single</td>
<td>2 to 8</td>
</tr>
</tbody>
</table>

### PLUG

<table>
<thead>
<tr>
<th>Series</th>
<th>Row</th>
<th>Circuits</th>
<th>Panel Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>105411-01XX</td>
<td>Dual</td>
<td>2 to 12</td>
<td>No</td>
</tr>
<tr>
<td>105411-11XX</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

### TPA (TERMINAL POSITION ASSURANCE)

<table>
<thead>
<tr>
<th>Series</th>
<th>Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>105415</td>
<td>2 to 8</td>
</tr>
</tbody>
</table>