Mega-Fit Power Connectors, 5.70mm Pitch

Mega-Fit Power Connectors deliver 25.0A 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/25.0A 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)
D. Female Crimp Terminal (Series 172063, 76823)
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

- New housing material
  Meets V0 and glow-wire European standards

- TPA
  Prevents terminal backout

- 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

Features and Advantages
Single-Row

- Fully isolated terminals
  Protect against potential damage of header terminals during mating

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, 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

**Packaging:** Bag, Reel, Tray

**UL File No.:** E29179

**CSA File No.:** LR-19980_A_000

**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 Plug: 105418, 105415
- Dual-Row Plug: 105418, 105415

**ELECTRICAL**

- Voltage (max.): 600V
- Current (max.): 25.0A
- 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 0.76µ (15 or 30µ") Gold plated (max.):
  - 6.0N per circuit

- Unmating Force: Tin plated (max.):
  - 6.5N initial unmating force per circuit
  - 0.38 or 0.76µ (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) 0.38 or 0.76µ (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 to +150°C

**Ordering Information**

**HEADER**

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Row</th>
<th>Circuits</th>
<th>Plating</th>
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<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>
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<td></td>
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<tr>
<td>172064</td>
<td>Right Angle</td>
<td></td>
<td></td>
<td>Gold</td>
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<tr>
<td>172065</td>
<td>Vertical</td>
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<td></td>
</tr>
<tr>
<td>200241-11X</td>
<td>Vertical</td>
<td></td>
<td>2 to 8</td>
<td>Tin/Gold</td>
</tr>
<tr>
<td>200241-12X</td>
<td>Right Angle</td>
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**TERMINAL**

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

### Ordering Information

**RECEPTACLE**

<table>
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<th>Series</th>
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**PLUG**

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<th>Panel Mount</th>
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<tr>
<td>105411-11XX</td>
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<td>2 to 12</td>
<td>Yes</td>
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**TPA (TERMINAL POSITION ASSURANCE)**

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<th>Series</th>
<th>Circuits</th>
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<tbody>
<tr>
<td>105415</td>
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