Mega-Fit Power Connectors, 5.70mm Pitch

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

- **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/26.0A 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

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**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)
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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
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

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.): 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
Unmating Force: Tin plated (max.):
  5.6N initial unmating force 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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<td>76825</td>
<td>Right Angle</td>
<td>Dual</td>
<td>2 to 12</td>
<td>Tin</td>
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<tr>
<td>76829</td>
<td>Vertical</td>
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<tr>
<td>172064</td>
<td>Right Angle</td>
<td>Dual</td>
<td>2 to 12</td>
<td>Gold</td>
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<td>172065</td>
<td>Vertical</td>
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<tr>
<td>200241-10XX</td>
<td>Vertical</td>
<td>Single</td>
<td>2 to 8</td>
<td>Tin/Gold</td>
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<td>200241-12XX</td>
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TERMINAL

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<td>Tin</td>
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<td>172063</td>
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<td>105417</td>
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Ordering Information

**RECEPTACLE**

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**PLUG**

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**TPA (TERMINAL POSITION ASSURANCE)**

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