Mega-Fit Power Connectors, 5.70mm Pitch

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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

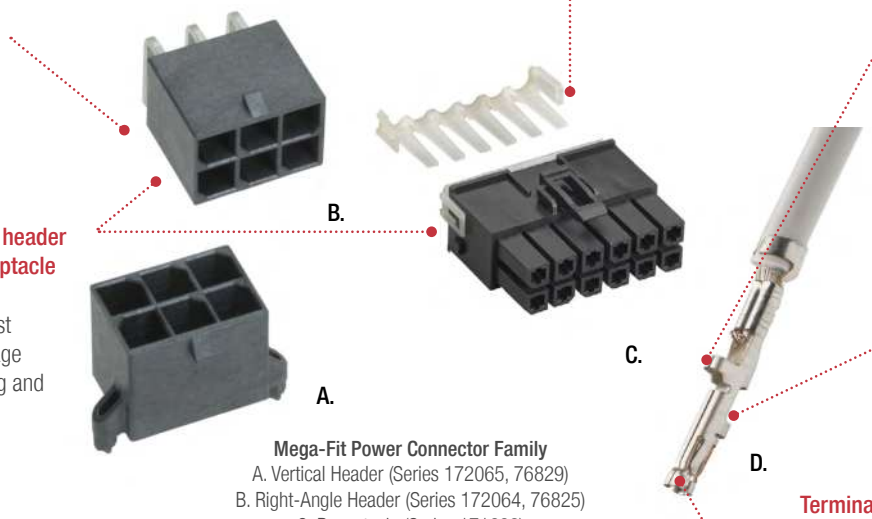
Power-dense design with high-current terminals, tight pitch and row spacing
Provides more power per linear and square millimeter than other mid-range power products in the industry

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

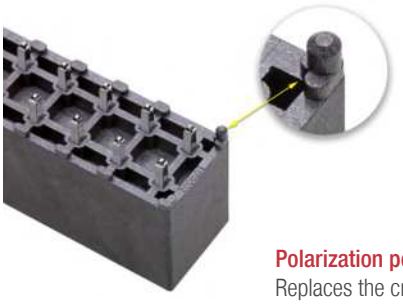
Fully isolated header pins and receptacle terminals
Protects against potential damage during handling and mating



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)

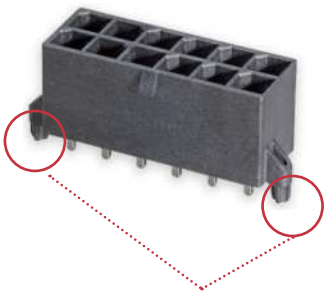
Tangless terminal design
Reduce the risk of handling/ transit damage

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

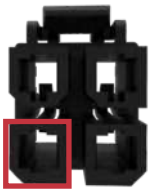


Crush peg removal
Delivers a smaller footprint on the PCB

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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





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

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





TPA
Prevents terminal backout

New housing material
Meets V0 and glow-wire European standards

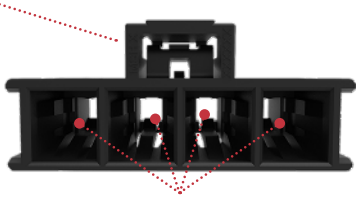


Features and Advantages
Single-Row

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 0.76µ (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

Series No.	Component	Row	Circuits	Plating
76825	Right Angle	Dual	2 to 12	Tin
76829	Vertical			
172064	Right Angle			Gold
172065	Vertical			
200241-11XX		Single	2 to 8	Tin/Gold
200241-12XX	Right Angle			

TERMINAL

Series No.	Type	AWG	Plating
76823	Female	12 to 16	Tin
172063			Gold
105417	Male		Tin
105418			Gold

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Ordering Information

RECEPTACLE

Series	Row	Circuits
171692	Dual	2 to 12
200456	Single	2 to 8

PLUG

Series	Row	Circuits	Panel Mount
105411-01XX	Dual	2 to 12	No
105411-11XX			Yes
213814	Single	2 to 8	Yes
213815			No

TPA (TERMINAL POSITION ASSURANCE)

Series	Circuits
105415	2 to 8

www.molex.com/link/megafit.html

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