

SHEERPWR™ CIRCULAR CONNECTOR

PCB-to-Busbar and PCB-to-PCB connectors

REPEATED LOW RESISTANCE AND HIGH MIS-ALIGNMENT

SheerPwr™ Circular is a high-current, low-resistance interface designed for connecting busbars to circuit boards. It uses a robust and compliant power contact assembled in a circular orientation.

The result is a power socket, designed to mate with traditional machined pins, which provides repeated low resistance, high mis-alignment and high current carrying capabilities.

- Redundant contact points for improved reliability and lower resistance
- Low profile socket – regardless of current carrying capacity
- Provides a minimum of 4.0mm of gatherability, increases with pin diameter

FEATURES

- Large beam deflection range handles up to +/-0.64mm permanent misalignment
- Redundant contact points
- Large gatherability
- AGT® silver plated contacts
- 3.6mm, 6mm, and 8mm mating pin sizes
- Low 6.8mm connector height
- Low halogen materials

NEW



TARGET MARKETS



BENEFITS

- When fully misaligned, all of the beams still make contact with the pin
- Low and stable resistance
- For blind-mate applications
- Lower resistance
- Current carrying range delivering 70A, 120A, or 160A, depending on pin diameter
- Compact size fits in many applications and allows for greater airflow
- Meets JEDEC JS709 Electronics Industry Standards

▶ SHEERPWR™ CIRCULAR CONNECTOR

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, UL 94 V-0, Black
- Terminal: High Conductivity Copper Alloy
- Contact Area: AGT® Silver-based plating

MECHANICAL PERFORMANCE

- Contact Wipe Distance: depends on pin length
- Durability: 100 mating cycles
- Mating Force: 20N to 50N

ELECTRICAL PERFORMANCE

- Contact Resistance: 0.05 to 0.1mΩ
- Current Rating (30°C temperature rise in still air)
 - 3.6mm- 70A; 6mm- 120A; 8mm- 160A
- Operating Voltage: depends on application
- Dielectric Withstanding Voltage: 1000V

TOOLING INFORMATION

- General flat press tooling required for vertical press-fit configuration

ENVIRONMENTAL

- Operating Temperature: -40°C to +105°C
- RoHS Information: this product is compatible according to the European Union Directive 2011/65/EU

SPECIFICATIONS

- Production Specification: GS-12-1316
- Application Specification: GS-20-0467

PACKAGING

- Trays

TARGET MARKETS/APPLICATIONS



AC/DC pluggable power supplies
Pluggable circuit breakers
Networking Equipment
Switches



Server
Storage



Industrial PC
Industrial Controls & Instrumentation
Circuit Breakers



Medical

PART NUMBERS



Receptacle Pin Diameter	Press-fit to PCB
3.6mm	10132381-20360LF
6.0mm	10132381-20600LF
8.0mm	10132381-20800LF

Mating Plug Pin Diameter	Press-fit to Busbar	Produces Mezzanine Stack Height *
3.6mm	10137675-012LF	15mm
6.0mm	10139665-2314LF	18mm
8.0mm	10139665-2422LF	26mm

* Other stack heights available upon request.

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Disclaimer

Please note that the above information is subject to change without notice.