

PwrMAX® Power Connectors

HIGH DENSITY POWER AND SIGNAL CONNECTOR SYSTEM

The PwrMAX® connector family offers a compact means for connecting up to 100A DC power in modern system architectures requiring high density and high current. PwrMAX® is available in coplanar, backplane, mezzanine and orthogonal configurations, making it suitable for PCB and busbar applications. In addition, PwrMAX® is plated in Amphenol ICC's proprietary GCS® plating technology which provides an ultra-low end-of-life resistance rating of just 0.30mΩ and overall lower voltage drop.

- 100A per contact
- ± 3.50mm gatherability for blind mating
- GCS® plating provides low resistance
- Press-fit and solder tail terminations
- 10 points of contact for long term reliability



TARGET MARKETS



FEATURES

- GCS® plating technology
- Industry proven contact design with 10 points of contact
- High-temperature thermoplastic
- Halogen-free housing
- Available in coplanar, backplane, mezzanine and orthogonal configurations
- Highly configurable power and signal contacts

BENEFITS

- Provides very low resistance & low voltage drop
- Provides superior long term reliability
- Wide operating temperature from -40°C to +125°C
- Meets next generation environmental requirements
- Modular design for both PCB and busbar applications
- Design flexibility

TECHNICAL INFORMATION

MATERIAL

- Power Contacts: High conductivity copper alloy
- Housing: High-temperature thermoplastic, UL94V-0
- Contact Finish: GCS® plating over nickel

ELECTRICAL PERFORMANCE

- Current Rating: Up to 100A per contact (30°C temperature rise in still air)
- Dielectric Withstanding Voltage: 2500V
- Contact Resistance: 0.30mΩ max. at end-of-life conditions

MECHANICAL PERFORMANCE

- Mating Force: 25.00N max. per high power contact; 7.00N max. per low power contact
- Insertion Force: 66.70N max. per high power contact; 90.00N max. per low power contact; 26.70N max. per signal contact
- Retention Force: 35.00N min. per high power contact; 15.00N min. per low power contact; 10.00N per signal contact

ENVIRONMENTAL

- Operating Temperature: -40°C to +125°C
- RoHS: This product is compatible according to the European Union Directive 2002/95/IEC

SPECIFICATIONS

- Coplanar/Backplane:
 - Product Specification: GS-12-1314
 - Application Specification: GS-20-0447
- Orthogonal:
 - Product Specification: GS-12-1342
 - Application Specification: GS-20-0452

APPROVALS AND CERTIFICATIONS

- UL and TUV-Approved

PACKAGING

- Trays

TARGET MARKETS/APPLICATIONS



Datacom/Networking Equipment
Switches
Telecom



Servers
Storage



Industrial Equipment

PART NUMBERS

Description	Mounting Style	Part Numbers
PwrMAX® BTB right angle receptacle 6HP24S	PCB retention pegs	10136993-001LF
PwrMAX® BTB right angle plug 4LP6HP24S	PCB boardlocks	10133137-003LF
PwrMAX® Mezzanine vertical receptacle	PCB retention pegs	10137124-001LF
PwrMAX® Mezzanine vertical plug	PCB boardlocks	10137125-002LF
PwrMAX® Ortho right angle plug	PCB boardlocks	10132640-001LF
PwrMAX® Ortho right angle receptacle	PCB retention pegs	10132644-002LF
PwrMAX® Ortho vertical receptacle	PCB retention pegs	10133407-002LF