



# **PwrMAX® Power Connectors**

# HIGH DENSITY POWER AND SIGNAL CONNECTOR SYSTEM

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

- 100A per contact
- ± 3.50mm gatherability for blind mating
- GCS<sup>®</sup> plating provides low resistance
- Press-fit and solder tail terminations
- I0 points of contact for long term reliability

#### **FEATURES**

- GCS<sup>®</sup> 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



**TARGET MARKETS** 

101010101010 001000100010 001100110011

#### 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: 0.30m $\Omega$  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

01010101010	Serv
	Stora

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 <sup>®</sup> Ortho right angle receptacle	PCB retention pegs	10132644-002LF
PwrMAX <sup>®</sup> Ortho vertical receptacle	PCB retention pegs	10133407-002LF

### www.amphenol-icc.com

#### Disclaimer

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FCI / Amphenol:

<u>10136993-001LF</u> <u>10135064-001LF</u> <u>10133137-003LF</u> <u>10139865-002LF</u> <u>10135066-001LF</u> <u>10139864-001LF</u> <u>10133137-001LF</u> <u>10137126-003LF</u> <u>10137126-001LF</u> <u>10137128-001LF</u> <u>10139195-003LF</u> <u>10138364-002LF</u> 10138366-001LF 10136689-001LF 10137124-001LF