

PWR PROFILE+® I/O

Low profile cable assemblies

LOW PROFILE, HIGH CURRENT DENSITY CABLE ASSEMBLY

Pwr Profile+® I/O address applications requiring additional power density in space constrained, chassis-based equipment platforms. The innovative power contact design has a lower profile for cable-to-board applications.

- Two power contacts for power and return applications
- Two signal pins for presence detection or power control
- Optional grounding shield on the board connector
- Touch-proof housing design
- Polarization to ensure proper mating



TARGET MARKETS



FEATURES

- Current rating up to 34A per contact for two power contacts without exceeding a 30°C temperature rise in still air
- 14AWG to 10AWG
- 10.5mm profile height
- Vented cable housing design
- Touch-proof feature design compliant with IEC60950 standard
- Polarized housing design
- Two signal contacts

BENEFITS

- High current density in compact design
- Offers design flexibility
- Low profile allows more airflow for system cooling in limited space applications
- Maximizes heat dissipation
- Safety feature
- Ensures proper mating
- Supports presence detection or power control



TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, UL94V-0, Black
- Power Contact Base Metal: High Conductivity Copper Alloy
- Contact Finish
 - Separable Interface: 0.76µm performance-based plating over Nickel
 - Board Termination Area: Matte Tin over Nickel

MECHANICAL PERFORMANCE

- Contact Wipe Distance
 - Power Contacts: 4.8mm min.
 - Signal Contacts: 1.5mm min.
- Durability: 200 mating cycles

APPROVALS AND CERTIFICATIONS

- UL E66906-138_2_

PACKAGING

- Right Angle Header: Tape/Reel or Trays

ENVIRONMENTAL

- Operating Temperature: -55°C to + 105°C
- RoHS: this product is compatible according to the European Union Directive 2011/65/EU

SPECIFICATIONS

- Product Specification: GS-12-594
- Application Specification: GS-20-116

PART NUMBERS

Description	Part Numbers
Right angle board mount plug, 1P+2S+1P plug with ground shield	10089872-101LF
1P+2S+1P receptacle, 2 to 6mm ² wire	10130701-xxxxxxxLF

ELECTRICAL PERFORMANCE

- Current Rating: 34A/contact max. at 30°C temperature rise in still air
- Operating Voltage: Up to 300V max.
- Dielectric Withstanding Voltage: 1000V
- Insulation Resistance:
 - Power Contacts: >5000MΩ initially
 - Signal Contacts: >500MΩ initially
- Contact Resistance:
 - Power Contacts: ≤ 2.0mΩ initially as well as after environmental exposure
 - Signal Contacts: ≤ 30mΩ initially as well as after environmental exposure

TARGET MARKETS/APPLICATIONS



Networking
Power I/O and Distribution in Datacom & Telecom
Uninterruptible Power Supplies (UPS)



Industrial Controls and Instrumentation
Battery and Power Strip Monitoring



Medical