EXTreme LPHPower Connectors



Designed with power blades parallel to the PC board, this mixed high-current power and signal connector system delivers up to 127.0A per linear inch, features a lowprofile height for enhanced system airflow, and offers flexible mating options

Features and Advantages



Power-Only Vertical Receptacle



Signal-Only Vertical Receptacle



Hybrid Vertical Receptacle



Hybrid Right-Angle Receptacles



Hybrid Right-Angle Plugs

Low-profile design, 7.50mm height Enhances system airflow and provides 127.0A per linear inch Flexible design configurations Easily matches system power requirements

Rated for current interruption Meets hot-plugging requirements

> Hybrid power/signal design solution with 2 isolated power contacts per housing bay (top and bottom) Allows power and return signals in the same bay for a total of 60.0A per power bay

> > Receptacle sides mate to Molex standard LPH plug or an industry-standard 1.57mm PCB gold finger card edge Extends design flexibility

Rugged signal and power contacts Reduces the potential for stubbing or damage

Hybrid Vertical Receptacle

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Markets and Applications

Data/Computing Test Equipment Workstations High-End Servers Rack Servers Industrial Industrial Controls Networking 1U Rack Box Backplanes Power Supplies

Servers

Telecommunications
Routers
Switches
Hubs
Cellular Base Stations
UAVs/Drones
Appliances
Entertainment Systems

HVAC Systems



Networking and Telecommunication



Data Center/Server Trays



High Power Bus Bar Solution Integration

Specifications

REFERENCE INFORMATION

Packaging: Tray or tube UL File No.: E29179 CSA File No.: LR19980 Designed In: Millimeters EU RoHS Compliant: Yes Halogen: Low halogen Glow Wire Compliant: No

MECHANICAL

Mating Force (max. per circuit): Power Contacts – 6.87N (1.54 lb) Signal Contacts – 1.08N (0.24 lb) Un-mating Force (max per circuit): Power Contacts – 5.88N (1.32 lb) Signal Contacts – 0.02N (0.03 lb) Durability: 250 cycles (receptacle and plug)

ELECTRICAL

Voltage: 250V max. Current (at 30°C temperature rise): Power - 30.0A max. Signal – 1.0A max. Contact Resistance (per contact): Initial End of Life Power (milliohms) 0.50 0.64 Signal (milliohms) 6.24 8.34 Dielectric Withstanding Voltage: 1,500V Insulation Resistance: 5,000 Megohms min. Current interruption: Power - 30.0A and 48V DC Signal - 1.0A at 30V

PHYSICAL

Housing: LCP Contact: Power Contacts - Copper (Cu) alloy Signal Contacts – Phosphor Bronze Plating: Contact Area — Select Gold Solder Tail Area — Tin Underplating — Nickel Flammability Rating: UL 94V-0 Operating Temperature: -40 to +105°C

www.molex.com/link/lphpower.html

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