SlimStack Board-to-Board Connectors, 0.40mm Pitch and 0.80mm Pitch, Battery Series

Achieve up to 10.0A of power and electrical reliability in an ultra-compact design with SlimStack Hybrid Power Connectors, designed for battery and other power applications.

As consumers continue to demand smaller devices and bigger current value, the need for microminiature designs grows. Hybrid connectors deliver design flexibility while meeting tight-packaging needs.

**Features and Advantages**

- **Delivers up to 10.0A power**
  Meets the growing power needs of tight-packaging applications

- **Dual-contact design for both power and signal contacts**
  Assures contact reliability

- **Compact hybrid interface with power and signal contacts**
  Combines extra signal lines into power connector footprint for space savings

**Applications**

**Mobile Devices**
- Smartphones
- Tablet PCs
- Wearable Devices
- Portable Audio
- Portable Navigation Equipment

**Medical Devices**
- Patient Monitoring
- Therapeutic and Surgical

**Delivers up to 6.0A**
Receptacle 505004 Series

**Delivers up to 9.0A**
Receptacle 104249 Series

**Delivers up to 10.0A**
Receptacle 505473 Series

- Plug 505006 Series
- Plug 104250 Series
- Plug 505476 Series

**Wide Alignment Area**
Provides easy and secure mating

**Armor Nail**
Prevents damage to the housing
Specifications

REFERENCE INFORMATION
Packaging: Embossed Tape on Reel
Designed In: Millimeters
RoHS: Yes
Halogen Free: Low-Halogen

ELECTRICAL
Voltage (max.): 50V
Current (max.):
505004/505006
Signal Contact: 0.3A per circuit
Power Contact: 3.0A per circuit
104249/104250
Signal Contact: 0.3A per circuit
Power Contact: 4.5A per circuit
505473/505476
Signal Contact: 0.5A per circuit
Power Contact: 5.0A* per circuit

Contact Resistance (max.):
505004/505006
Signal Contact: 80 milliohms
Power Contact: 10 milliohms
104249/104250
10 milliohms
505473/505476
Signal Contact: 60 milliohms
Power Contact: 10 milliohms
Dielectric Withstanding Voltage: 250V AC
Insulation Resistance (min.): 100 Megohms

MECHANICAL
Durability (max.): 10 cycles

PHYSICAL
Housing: LCP, UL94V-0, Black
Contact: Copper Alloy
Plating:
Contact Area – Gold
Solder Tail Area – Gold
Underplating – Nickel
Operating Temperature: -40 to +85˚C

Dimensions
Refer to drawing for detail dimension

Ordering Information

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*10.0A of current per circuit is applicable if the circuit was constructed by two power circuits via a PWB/FPC circuit. The same applies for the 6.0A and 9.0A versions.

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Order No. 987651-2484 Rev. 5
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