SlimStack Board-to-Board Connectors, 0.35, 0.40 and 0.80mm Pitch, Battery Series

Achieve up to 15.0A 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 15.0A power**
  - Meets the growing power needs of tight-packaging applications

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

- **Dual-contact design**
  - Assures contact reliability

**Applications**

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

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

**Improved Armor**
- Protects inner housing

**Armor nail**
- Prevents damage to housing

**Wide alignment area**
- Provides easy and secure mating

**Delivers up to 6.0A**
- Receptacle, 505004 Series
- Plug, 505006 Series

**Delivers up to 9.0A/11.0A**
- Receptacle, 104249/207419 Series
- Plug, 104250/207420 Series

**Delivers up to 10.0A**
- Receptacle, 505473 Series
- Plug, 505476 Series

**Delivers up to 15.0A**
- Receptacle, 211175 Series
- Plug, 211176 Series
SlimStack Board-to-Board Connectors, 0.35, 0.40 and 0.80mm Pitch, Battery Series

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, Power Contact: 4.5A per circuit
- 505473/505476: Signal Contact: 0.5A per circuit, Power Contact: 5.0A per circuit
- 207419/207420: Signal Contact: 0.3A per circuit, Power Contact: 5.5A per circuit
- 211175/211176: Signal Contact: 0.3A per circuit
- (Power Nail/1pin + Power Contact/2pin): 15.0A

Contact Resistance (max.):
- 505004/505006: Signal Contact: 80 milliohms, Power Contact: 10 milliohms
- 104249/104250: Signal Contact: 60 milliohms, Power Contact: 10 milliohms
- 505473/505476: Signal Contact: 50 milliohms, Power Nail/Power Contact: 15 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

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Circuits</th>
<th>Current</th>
<th>Signal Pitch (mm)</th>
<th>Mated Height (mm)</th>
<th>Mated Width (mm)</th>
<th>Length (mm)</th>
</tr>
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<tbody>
<tr>
<td>Receptacle</td>
<td>Plug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>211175-0080</td>
<td>211176-0080</td>
<td>8 (4 signal; 4 power) + 2 power nail</td>
<td>15.0A</td>
<td>0.35</td>
<td>0.7</td>
<td>2.00</td>
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<tr>
<td>505473-0810</td>
<td>505476-0810</td>
<td>8 (4 signal; 4 power)</td>
<td>10.0A</td>
<td>0.40</td>
<td>0.6</td>
<td>2.00</td>
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<tr>
<td>505473-0810</td>
<td>505476-0810</td>
<td>8 (4 signal; 4 power)</td>
<td>10.0A</td>
<td>0.40</td>
<td>0.6</td>
<td>2.00</td>
</tr>
<tr>
<td>505004-0812</td>
<td>505006-0812</td>
<td>8 (4 signal; power)</td>
<td>6.0A</td>
<td>0.75</td>
<td>2.50</td>
<td>4.20</td>
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<tr>
<td>207419-0081</td>
<td>207420-0081</td>
<td>8 (4 signal or power)</td>
<td>11.0A</td>
<td>0.80</td>
<td>0.75</td>
<td>2.50</td>
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<tr>
<td>104249-0810</td>
<td>104250-0810</td>
<td>8 (4 signal or power)</td>
<td>9.0A</td>
<td>0.80</td>
<td>0.75</td>
<td>2.50</td>
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</table>

*Maximum current of 15.0A per connector is applicable if the circuit is constructed by two power circuits and one power nail via a PWB/FPC circuit.
*Maximum current of 11.0/10.0/9.0/6.0A per connector is applicable if the circuit is constructed by two power circuits via a PWB/PC circuit.

www.molex.com/link/slimstack.html

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