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

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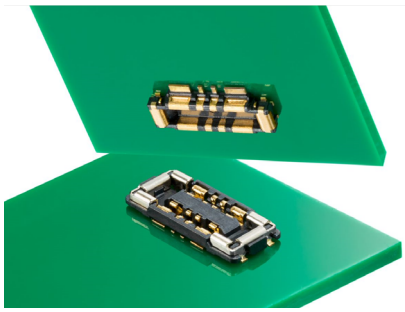


Achieve up to 10.0A of power and electrical reliability in an ultra-compact design with SlimStack Hybrid Power Connectors, designed for battery and other power applications.

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

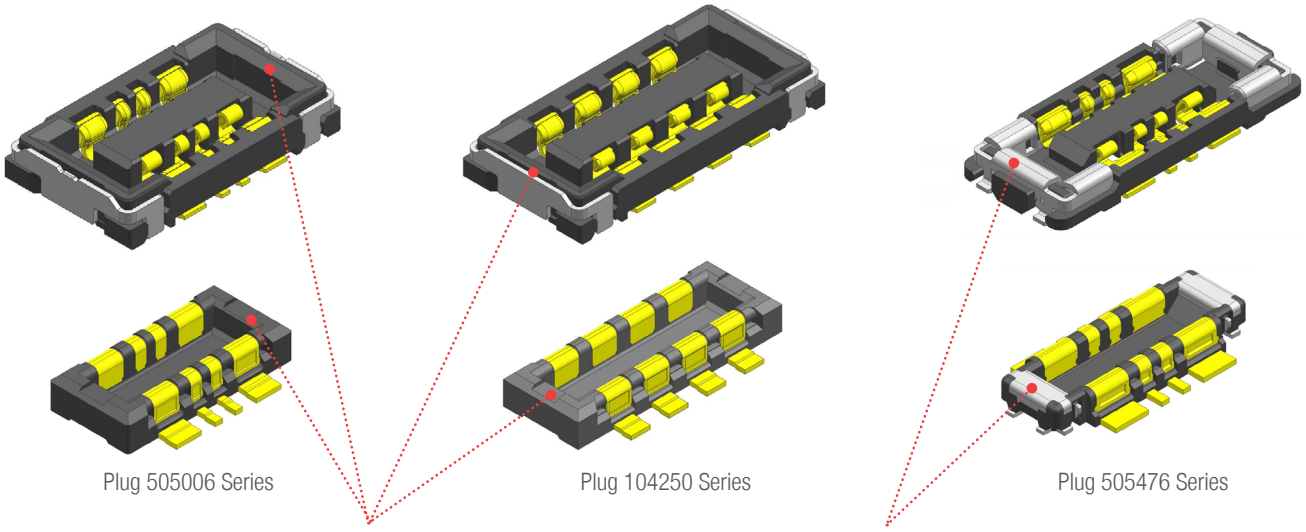
Dual-contact design for both power and signal contacts
Assures contact reliability

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

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

Applications

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

Medical Devices
- Patient Monitoring
- Therapeutic and Surgical

Smartphone

Wearable Watch

Patient Monitoring

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

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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

ELECTRICAL
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

Order No.		Mated Height (mm)	Mated Width (mm)	Circuits	Metal Armor Housing Cover	Current
Receptacle	Plug					
505473-0810	505476-0810	0.60	2.00	8 (4 power; 4 signal)	Yes	10.0A*
505473-1010	505476-1010			10 (4 power; 6 signal)		
505004-0812	505006-0812	0.75	2.50	8 (4 power; 4 signal)	No	6.0A*
104249-0810	104250-0820			8 (power or signal)		9.0A*

*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.

www.molex.com/link/slimstack.html

Order No. 987651-2484 Rev. 5 APN/0k/GF/2018.08