



Achieve up to 10A of power and electrical reliability in an ultra-compact design with SlimStack Hybrid Power connectors, designed for battery and other power applications for mobile devices such as cellphones, Tablet PCs and portable medical equipment

Features and Benefits

Delivers up to 10A of power	Meets the growing power needs of mobile applications
Narrow pitch and width, ultra-low profile and short length	Offers maximum space savings
Armor metal covers on housing corners (10A version)	Prevent damage to the housing even when misaligned during mating
Dual-contact design for both power and signal contacts	Assures contact reliability; withstands shock and vibration
Wide guiding area on housing wall ends	Provides mating alignment for more efficient operator assembly while avoiding housing damage
Compact hybrid interface with power and signal contacts	Combines extra signal lines into power connector footprint for space savings
Audible click during mating	Provides operators with maximum mating assurance
Low contact resistance	Offers up to ten milliohms of contact resistance for electrical current stability

Markets and Applications

Mobile Devices

- Smart Phones
- Tablet PCs

Consumer

- Portable Audio
- Portable Navigation Equipment

Medical

- Portable Patient Monitoring
- Portable Endoscopy Light Source
- Portable Battery Device



Medical Equipment



Smart Phone



Portable Audio Player

SlimStack™ Hybrid Power SMT Board-to-Board Connectors

Armor Cover Type
(0.40mm Pitch, 0.60mm Height, 10A)

505473 Receptacle

505476 Plug

Standard Type
(0.40mm Pitch, 0.75mm Height, 6A)

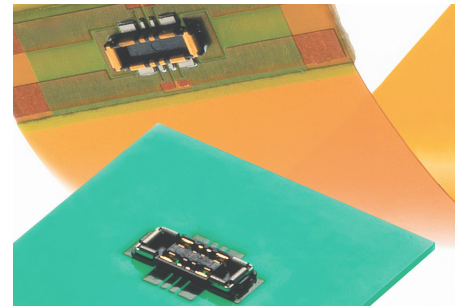
505004 Receptacle

505006 Plug

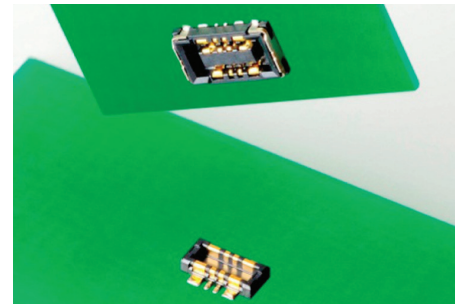
(0.80mm Pitch, 0.75mm Height, 9A)

104249 Receptacle

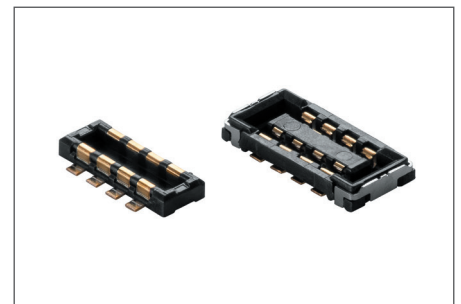
104250 Plug



SlimStack™ Hybrid Power Armor Cover Type, 0.60mm Height, 10 Amps of Power



SlimStack™ Hybrid Power, Standard Type, 0.75mm Height, 6 Amps of Power



SlimStack™ Hybrid Power, Standard Type, 0.75mm Height, 9 Amps of Power

Specifications

REFERENCE INFORMATION

Packaging: Embossed tape
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

ELECTRICAL

Voltage (max.): 50V
Current (max.):
505473/505476

For Signal Pin: 0.5A/Pin
For Power Pin: 5.0A/Pin*

505004/505006

For Signal Pin: 0.3A/Pin
For Power Pin: 3.0A/Pin*

104249/104250

For Signal Pin: 0.45A/Pin
For Power Pin: 4.5A/Pin

Contact Resistance:

505473/505476

For Signal Pin: 60 milliohms max./Pin
For Power Pin: 10 milliohms max./Pin

505004/505006

For Signal Pin: 80 milliohms max./Pin
For Power Pin: 10 milliohms max./Pin

104249/104250

10 milliohms max./Pin

Dielectric Withstanding Voltage:
250V AC (rms)

Insulation Resistance:
100 Megohm min.

MECHANICAL

Durability (min.): 10 cycles

PHYSICAL

Housing: LCP, black

Contact: Copper Alloy

Plating:

Contact Area — Gold

Solder Tail Area — Gold

Underplating — Nickel

Operating Temperature:
-40 to +85°C

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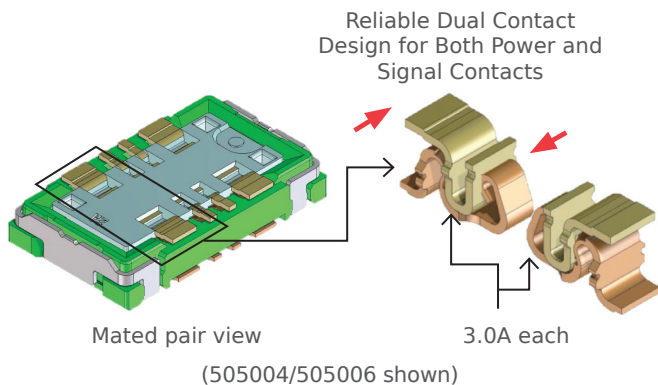
(0.80mm Pitch, 0.75mm
Height, 9A)

104249 Receptacle

104250 Plug

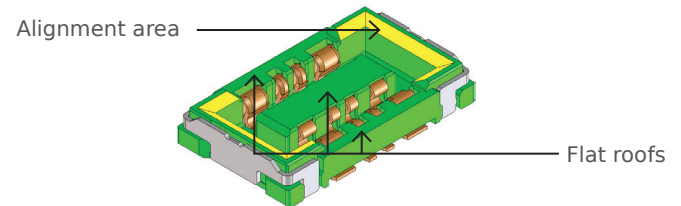
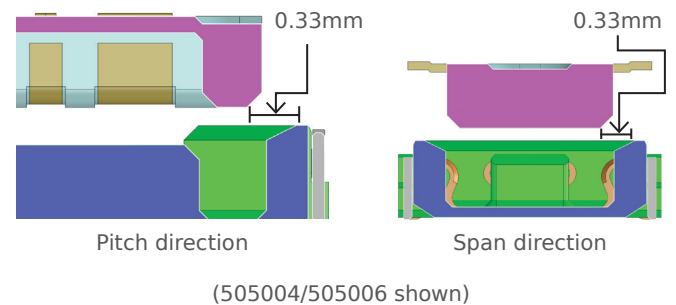
Additional Product Features

Reliable Dual Contact Interface



By incorporating a dual contact design for all terminals, this assures that one pair of the power and signal contacts will remain connected if subjected to shock or vibration. This is critical to maintain functionality in mobile applications, which are always at risk being dropped or shaken.

Large Alignment Area



Wide alignment area helps operators guide the connectors together for mating more easily.

Ordering Information

Circuit Size	Mated Height	Mated Width	Metal Armor Housing Cover	Current	Receptacle Order No.	Plug Order No.
8 (Four signal; four power)	0.60mm	2.00mm	Yes	10A*	505473-0810	505476-0810
10 (Six signal; four power)	0.60mm	2.00mm	Yes	10A*	505473-1010	505476-1010
8 (Four signal; four power)	0.75mm	2.50mm	No	6A*	505004-1010	505006-1010
8 (Power or signal)	0.75mm	2.50mm	No	9A*	104249-0810	104250-0820

*10A of current per circuit is applicable if the circuit was constructed by two power pins via a PWB/FPC circuit. The same applies for the 6A and 9A versions.

www.molex.com/link/slimstack035.html