



**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 high-strength 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, 0.40mm Pitch**

**Armor Cover Type**

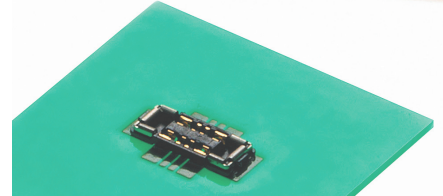
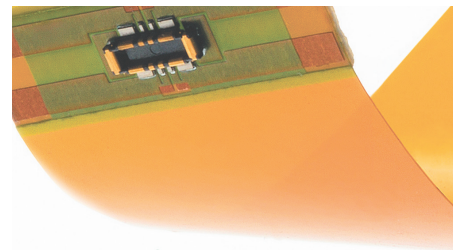
(0.60mm Height, 10 Amps Power)

- 505473** Receptacle
- 505476** Plug

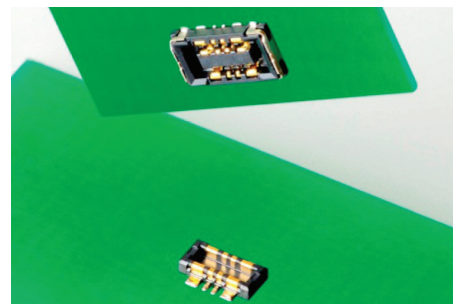
**Standard Type**

(0.75mm Height, 6 Amps Power)

- 505004** Receptacle
- 505006** Plug



SlimStack™ Hybrid Power Armor Cover Type, 0.60mm Height, 10 Amps of Power (505473 Receptacle, below; 505476 Plug, above)



SlimStack™ Hybrid Power, Standard Type 0.75mm Height, 6 Amps of Power (505004 Receptacle, above; 505006 Plug, below)

## 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\*  
 Contact Resistance:  
 505473/505476  
 For Signal Pin: 60 milliohm max./Pin  
 For Power Pin: 10 milliohm max./Pin  
 505004/505006  
 For Signal Pin: 80 milliohm max./Pin  
 For Power Pin: 10 milliohm 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

## SlimStack™ Hybrid Power SMT Board-to-Board Connectors, 0.40mm Pitch

### Armor Cover Type

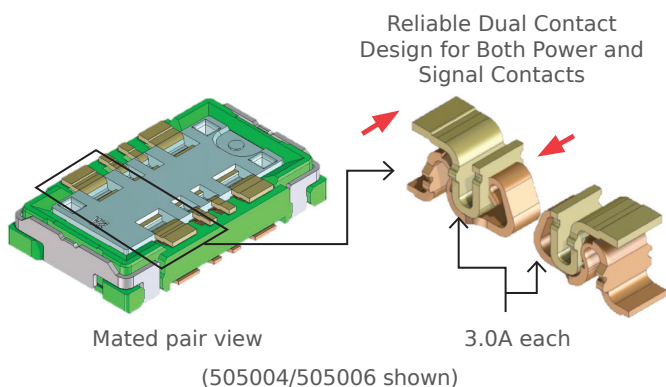
(0.60mm Height,  
 10 Amps Power)  
**505473** Receptacle  
**505476** Plug

### Standard Type

(0.75mm Height,  
 6 Amps Power)  
**505004** Receptacle  
**505006** Plug

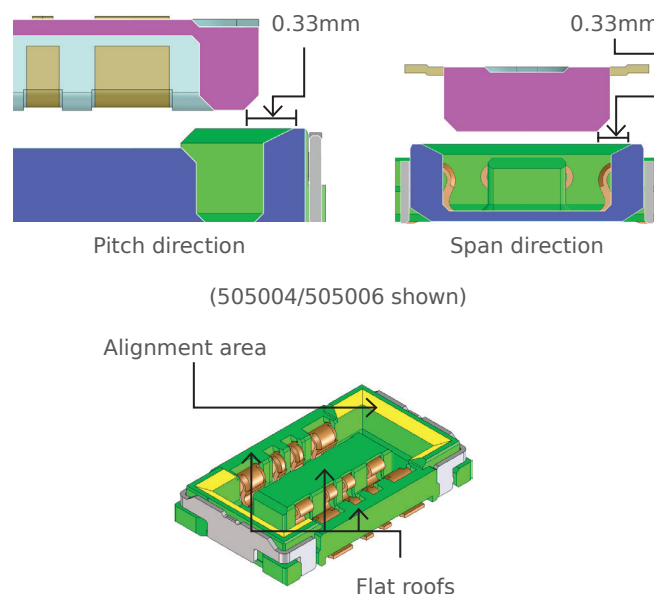
## Additional Product Features

### 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*	<a href="#">505473-0810</a>	<a href="#">505476-0810</a>
10 (Six signal; four power)	0.60mm	2.00mm	Yes	10A*	<a href="#">505473-1010</a>	<a href="#">505476-1010</a>
8 (Four signal; four power)	0.75mm	2.50mm	No	6A*	<a href="#">505004-1010</a>	<a href="#">505006-1010</a>

\*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 version.

[www.molex.com/link/slimstack035.html](http://www.molex.com/link/slimstack035.html)