



**Ideal for the thinnest mobile devices, the SlimStack™ ST7 0.35mm pitch board-to-board connector system offers the most space savings of any similar pitch system along with robust features that provide secure mating retention, terminal protection and reliable electrical contact.**

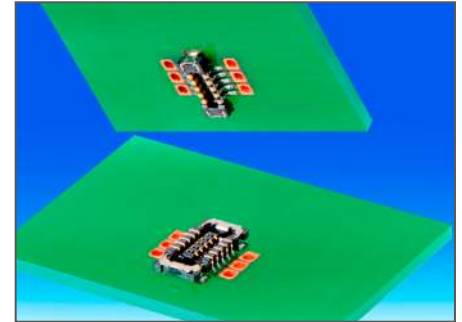
The Molex ST7 series offers a narrow width, short length and low profile for ultimate space savings. This space savings becomes more important as the circuit size increases for mobile applications such as thin smart phones.

The SlimStack ST7 system also incorporates a variety of robust mechanical and electrical features to complement its space savings. These include a double friction lock system that helps ensure secure mating retention, which often becomes more of an issue as pitch and height shrink.

Other unique features include a sharp-edge terminal design that removes flux while locking into place, and a tactile click feeling that helps assure operators of complete mating. The system also includes nickel-barrier plating to avoid the risk of flux wicking. The ST7 system will initially be offered in a ten-circuit version, with options of up to 40 circuits added later.

**SlimStack™ ST7  
0.35mm Pitch  
SMT Board-to-  
Board Connectors  
0.70mm Height,  
1.90mm Width**

504008 Receptacle  
504011 Plug



SlimStack™ ST7 0.35mm Pitch  
SMT Board-Board Connectors

## Features and Benefits

Ultra-narrow pitch and width, low profile and reduced length	Maximum space savings
Terminal and nail friction locks	Secure mating retention and electrical contact
Sharp-edge terminal design	Removes flux contaminants for improved electrical contact
Bottom wall housing design	Enables PCB tracing under housing for additional space savings
Cover nail	Protection against damage during zippering-style unmating
Nickel-barrier plating	Prevents solder wicking

## Markets and Applications

- > Mobile Device
  - Smart Phone
  - Mobile Phone
  - Tablet PC
  - Portable Audio
  - Portable Game Device
- > Digital Still Camera
- > Digital Video Camera
- > Any compact, handheld device



Smart phone



Portable Audio Player



Tablet PC



Digital Still Camera

### Specifications

#### REFERENCE INFORMATION

- Designed In: mm
- Packaging: Embossed Tape
- ROHS Compliant: Yes
- Halogen Status: Low Halogen

#### Electrical

- Voltage: 50V max.
- Current: 0.3A max.
- Contact Resistance:  
80 milliohms max.
- Dielectric Withstanding Voltage:  
250V AC
- Insulation Resistance:  
100 Megohms min.

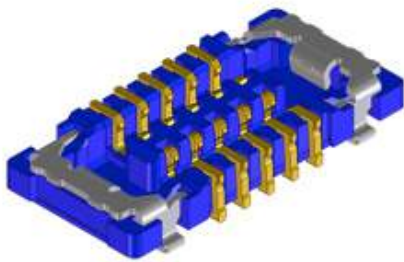
#### Mechanical

- Durability: 30 cycles

#### Physical

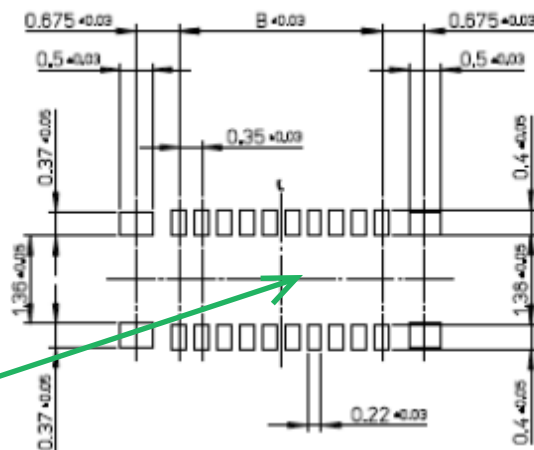
- Housing: LCP, UL 94V-0, black
- Contact: Copper Alloy
- Plating:  
Contact Area – Gold  
Solder Tail Area – Gold  
Underplating – Nickel
- Operating Temperature: -40 to +85°C

### Additional Product Features



SlimStack ST7

Major competitive designs do not allow for PCB tracing under the housing.



The SlimStack ST7 series allows for open tracing space underneath both the plug and receptacle housing. This provides more design flexibility and increased space savings versus competitive designs.

### Ordering Information

Circuit Size	Order No. Receptacle	Order No. Plug	Width
10	504008-1010	504011-1010	1.90mm