



**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.**

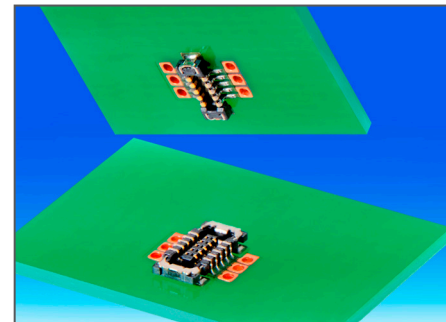
The Molex ST7 series offers a narrow width, short length and low profile for ultimate space savings. This space savings becomes more important as the circuit size increases for mobile applications such as thin smart phones.

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



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

**504008** Receptacle  
**504011** Plug

**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.

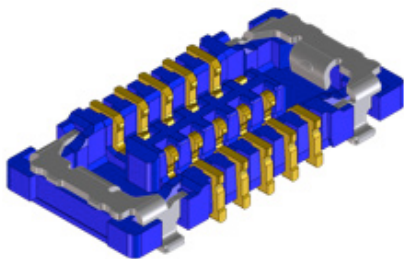
**MECHANICAL**

Durability: 30 cycles

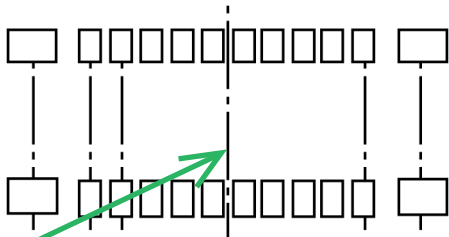
**PHYSICAL**

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**

Order No.	Type	Circuit Size
<a href="#">504008-1010</a>	Receptacle	10
<a href="#">504011-1010</a>	Plug	10

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