

# Cool Stack 0.80mm Hybrid Power & Signal Connectors

## HYBRID CONNECTOR FOR COPLANAR BOARD-TO-BOARD APPLICATION

Cool Stack Hybrid Power and Signal connectors provide one-piece high speed and high power solution while addressing multiple networking standards like PCIe, and SAS/SATA. It offers a maximum current rating of 16A per power pin, which aids in supporting applications with medium power requirement. Moreover, these connectors provide robust and reliable interconnection between two large boards with its screw locking features. It comes in a low profile 3mm design for coplanar applications.

- Comes in coplanar configuration
- 16Gb/s high speed performance
- Supports multiple impedance systems



### FEATURES

- Current rating of 16A per power pin
- Signal pins with 0.80mm pitch and current rating of 0.7A per signal pin
- Screw locking feature
- Open pin field design
- Low profile 3mm design for coplanar application
- Supports PCB thicknesses of 3.00mm and above

### BENEFITS

- Supports medium power applications
- Supports most mating board applications
- Provides robust and reliable interconnection between two large boards
- Supports both single-ended and differential pairs signal with speed up to 16Gb/s
- Ideal for high density applications where drives are positioned above connectors
- Supports multiple applications from ICT to Consumer
- Flexibility in accommodating various PCB board-to-board thicknesses

## TECHNICAL INFORMATION

### MATERIAL

- Contact Base Metal: Copper Alloy
- Contact Area Finish: Gold over Nickel
- Housing: High temperature thermoplastic (UL 94V-0)

### ELECTRICAL PERFORMANCE

- Contact Resistance
  - 40mΩ max.
  - 20mΩ max. change after test
- Current Rating: 16A per power pin, 0.7A per signal pin with temperature rise not exceeding 30°C
- Dielectric Withstanding Voltage: 1000V DC for power and 500V DC for signal

### MECHANICAL PERFORMANCE

- Durability: 200 mating cycles

### ENVIRONMENTAL

- Temperature Life: 105±2°C for 240 hours. Per EIA 364-17
- Thermal Shock: 10 cycles between -55°C to +85°C Per EIA 364-32
- Humidity: 24 cycles between 25±3°C at 80±3% RH and 65±3°C at 50±3% RH. Per EIA 364-31
- Mixed Flow Gas

### PACKAGING

- Tray available

### TARGET MARKETS/APPLICATIONS



Baseband Radio  
Commercial Systems  
Units Networking



High-end Computing System  
Server and Storage Systems

## PART NUMBER SELECTOR

CS102P055S001	X	1
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Plating Specification	
1	0.76µm Au
2	0.38µm Au
3	Gold Flash
4	0.76µm PdNi + Gold Flash