

Slim Cool Edge 0.65mm Hybrid Power & Signal Connectors

SPACE-SAVING HYBRID CONNECTOR FOR VERSATILE BOARD-TO-BOARD APPLICATIONS

Slim Cool Edge Hybrid Power and Signal connectors provide one-piece high speed and high power card-edge package. Thee connectors offer a cost competitive and high density solution. These versatile solutions based on a 0.65mm signal pitch design offer multiple BTB configurations like right angle, mezzanine and coplanar. Moreover, the connectors are designed as Open Pin Field and are hot plug capable. These connectors feature modular tooling that allows multiple power-signal combinations for vertical configurations.

- Right angle and straddle mount options are available upon request
- High Speed up to 32GT/s (or 56GT/s PAM4) capability
- Supports multiple impedance systems



FEATURES

- Power pin pitch at 1.30mm and current rating of 3A per pin
- Signal pin pitch at 0.65m and current rating of 0.5A per pin
- Power pins from 4 to 12 and signal pins range from 20 to 280
- Offset signal pin with SMT termination
- Open pin field design
- Vertical, right angle, and straddle mount configurations for coplanar, mezzanine, and midplane applications
- Supports 1.6mm thick mating board
- Different boardlock options available
- Provides latch for AIC

BENEFITS

- Supports small power BTB applications
- Supports most mating board applications
- Allows flexible power-signal combinations
- Provides better signal integrity performance
- Supports both single-ended and differential pairs with speeds up to 32GT/s (or 56GT/s PAM4)
- Supports multiple applications ranging from ICT to consumer
- Supports most standard BTB applications
- Allows flexible PCB hold-down option
- Secure locking for AIC or cable plug

Slim Cool Edge 0.65mm Hybrid Power & Signal Connectors Signal Connectors

TECHNICAL INFORMATION

MATERIAL

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

ELECTRICAL PERFORMANCE

- Contact Resistance: $30m\Omega$ max. initial; $15m\Omega$ max. change after test
- Current Rating: 3A per power pin, 0.5A per signal pin with temperature rise not exceeding 30°C
- Dielectric Withstanding Voltage: 500V DC for power and 500V DC for signal

MECHANICAL PERFORMANCE

- Durability: 200 mating cycles
- Mating Force: 1N/pin max. for power pin;
 0.6N/pin max. for signal pin
- Unmating Force: 0.1N/pin min. for power pin;
 0.06N/pin min. for signal pin

ENVIRONMENTAL

- Humidity: 24 cycles between 25±3°C at 80±3%
 RH and 65±3°C at 50±3%
 RH. Per EIA 364–31
- 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
- Mixed Flow Gas

APPROVALS & CERTIFICATION

- UL

SPECIFICATIONS

- Amphenol Product Specification: SSE004
- Amphenol Application Specification: SSE005

PACKAGING

• Tray/Reel

TOOLING INFORMATION

Special pin count option available upon request

TARGET MARKETS/APPLICATIONS



Server and Storage Systems High-end Computing system



Baseband Radio Units Networking Commercial Systems

▶ Slim Cool Edge 0.65mm Hybrid Power & Signal Connectors

PART NUMBER SELECTOR

