

0.40mm Fine Pitch 3.0mm Stacked Height Board-to-Board

FINE PITCH BOARD-TO-BOARD CONNECTORS

Amphenol's 0.40mm Fine Pitch 3.0mm Stacked Height Board-to-Board connectors are suitable for a wide range of high-reliability applications and demanding environments. Its unique connector design allows the rotation angle after fully mated at 0.7° and X&Y axis mating misalignment of 0.3mm. This pair of connectors comes with data rates up to 6Gbs. They are highly durable with the capacity to withstand up to 50 mating cycles. We are offering this product range with various positions to give design flexibility and application needs.

- Small footprint saves PCB real estate
- Meets high transmission requirement with data rates up to 6Gb/s
- High durability with 50 mating cycles
- High un-mating force ensures secure connection
- The normal wipe length allows contact reliability during mating process









FEATURES

Scalable pin count

• Optimized housing and terminal profile for SI performance

- Withstands up to 50 mating cycles
- The terminal geometric design provides normal wipe length at 0.45 ± 0.10mm
- · High un-mating force
- RoHS compliant and lead-free

BENEFITS

- Accommodates a variety of design and application needs
- The mating pair supports speed performance up to 6Gb/s to meet high transmission requirement
- High durability
- Improves contact reliability during mating
- Ensures secure connection
- Meets environmental, health and safety requirements

≥ 0.40mm Fine Pitch 3.0mm Stacked Height Board-to-Board

TECHNICAL INFORMATION

MATERIAL

■ Terminal: Copper Alloy

■ Housing: High Temperature Thermoplastic (UL94V-0)

■ Plating: 5µin Au on contacts and 3µin Au on solder tail area

ELECTRICAL PERFORMANCE

• Current Rating: 0.5A per contact

■ Voltage Rating: 250VAC

• Insulation Resistance: $100M\Omega$ min. @ 500VAC

 Dielectric Withstanding Voltage: 250VAC, 1 minute, show no evidence of arc-cover, insulation breakdown or leakage current in excess of 0.5mA

MECHANICAL PERFORMANCE

• Mating Force: 47.1N max.

• Un-mating Force: 7.8N min.

• Contact Retention Force: 0.05 kgf min. per contact

Durability: 50 mating cycles

PACKAGING

■ Tape & Reel

ENVIRONMENTAL

 Temperature Life: High Temperature Life test in accordance to MIL-STD-202-G

■ Mechanical Shock: In accordance to EIA-364-27

■ Operating Temperature Range: -55°C to +105°C

APPROVALS AND CERTIFICATIONS

• UL

SPECIFICATIONS

■ Amphenol Product Specification: GS-12-1617

Packaging Specification: GS-14-2631

TARGET MARKETS/APPLICATIONS



Storage Server



Consumer



Data

PART NUMBERS

Description	Part Numbers
30pos 0.40mm 3mm SH Board-to-Board Plug	10169995-030000LF
40pos 0.40mm 3mm SH Board-to-Board Plug	10169995-040000LF
64pos 0.40mm 3mm SH Board-to-Board Plug	10169995-064000LF
30pos 0.40mm 3mm SH Board-to-Board Receptacle	10169996-030000LF
40pos 0.40mm 3mm SH Board-to-Board Receptacle	10169996-040000LF
64pos 0.40mm 3mm SH Board-to-Board Receptacle	10169996-064000LF