

0.80mm Board-to-Board 100Ω– G832MC Series

0.80MM PITCH, 100Ω BOARD-TO-BOARD SOLUTION

Amphenol high speed board-to-board connectors provide high contact force reliability ensuring strong connectivity, forced insertions, and removals.

Broad range of stacking heights and pin counts are offered to provide maximum design flexibility.

Amphenol 0.80mm pitch connector design is suitable for high performance applications.

- Superior signal integrity (SI) performance
- High contact force ensures mating reliability
- Polarization key at pin edge to prevent misalignment
- All stack heights meet SAS 3.0, 12GT/s
- Gold flash plating protects against corrosion

NEW


TARGET MARKETS



FEATURES

- 5 to 23mm stack heights
- 40 to 120 position sizes in 20 position increments
- Polarization key, and coined feature at pin edge
- Snap-in and catch operation
- 100Ω differential impedance
- Gold flash (8, 15, 30μin) gold plating for reliable mating
- 0.10mm max. coplanarity for SMT process
- All stack heights meet SAS 3.0, 12GT/s electrical requirements

BENEFITS

- Wide range of options for different application needs
- Strengthens lead-in and improves contact wipe during connector mating
- Superior tactile sense
- Robust mating operation ensures strong connection
- Optimized high speed performance at all stack heights
- Improves contact resistance and prevents corrosion
- Caps, mylar and PCB locator pegs options available for correct board orientation
- Superior signal integrity (SI) performance

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, UL 94V-0, other color options available
- Contact: Copper Alloy, 0.15mm thickness,
- Plating: Selective gold-plated on contact area, 100u" min. matte tin plated on soldering tail, 50u" min. nickel under-plated overall
- Cap: Stainless steel, 0.20mm thickness

MECHANICAL PERFORMANCE

- Insertion Force: 0.9N (90 gf) max. per contact
- Withdrawal Force: 0.1N (10 gf) min. per contact
- Durability: 100 mating cycles
- Vibration: No disturbance >1μs
- Mechanical Shock: No disturbance >1μs

ELECTRICAL PERFORMANCE

- Low Level Contact:
 - Initial: 30mΩ max.
 - Final Δ R: 20mΩ max.
- Current Rating: 0.8A per contact
- Temperature Rise: T30°C max.
- Insulation Resistance: 1000mΩ min.
- Differential Impedance: 85±10 Ω
- Voltage Rating: 100VAC/ DC

PACKAGING

- Tape and Reel
- Tube available upon request

SPECIFICATION

- Amphenol Product Specification: PS-7580

ENVIRONMENTAL

- Operating Temperature: -40°C to 125°C
- Shipping and Storage Temperature: -40°C to 125°C
- Thermal Shock: No damage Δ R: 20mΩ max.
- Cyclic Temperature and Humidity: No damage Δ R: 20mΩ max.
- Temperature Life: No damage Δ R: 20mΩ max.
- Mixed Flowing Gas: No damage Δ R: 20mΩ max.
- Thermal Disturbance: No damage Δ R: 20mΩ max.
- Solderability: 95% of immersed area, No voids and pin holes
- Soldering Heat: No damage

TARGET MARKETS/APPLICATIONS



IP Phone
Telecom/Datacom equipment



High End Computers
Router
Servers
Test Card and Card Extenders



Test and Measurement Equipment

PART NUMBERS

Description	Part Numbers
0.80mm pitch Receptacle, Dual Row, Vertical, SMT, 100Ω	G832MC0XXXXXX2XHR
0.80mm pitch Header, Dual Row, Vertical, SMT, 100Ω	G832MC1XXXXXX2XHR

CMIOBTG832MC071EA4

Mouser Electronics

Authorized Distributor

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Amphenol:

G832MC110605122BHR	G832MC010601122HR	G832MC110605122HR	G832MC010606122BHR
G832MC010608222HR	G832MC010605122HR	G832MC010608122HR	G832MC130404122HR
G832MC110805022HR	G832MC030605022HR	G832MC130402222HR	G832MC030401222HR
G832MC110403022HR	G832MC010601022HR	G832MC130405122HR	G832MC030801222HR
G832MC130404222HR	G832MC110402122HR	G832MC110803122HR	G832MC111204222HR
G832MC030405222HR	G832MC111202022HR	G832MC030605322HR	G832MC131204222HR
G832MC030608222HR	G832MC130805022HR	G832MC111205122HR	G832MC110405322HR
G832MC130642022HR	G832MC010641222HR	G832MC010808222HR	G832MC131205022HR
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G832MC010641122HR	G832MC030606122HR	G832MC111202322HR	G832MC030808122HR
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