Mez-anine

Amphenol ICC

M-Series[™] 56

56GB/S HIGH SPEED MEZZANINE BGA CONNECTOR SYSTEM

Leveraging proven technologies, including an industry leading BGA design, offering superior self-aligning and self-leveling. With a next generation differential pair contact design for up to 56Gb/s NRZ and 112Gb/s PAM4 performance.

- · High density, high speed, dual-point contacts
- Self-aligning/leveling for multiple connector use
- 1.6mm column to column pitch
- 56Gb/s NRZ and 112Gb/s PAM4 performance
- Stack Heights: 4mm & 5mm

FEATURES

- Dedicated 85 Ω and 92 Ω Designs
- 22+ year old solder joint reliability per IPC-SM-785
- Industry-leading self-alignment
- Integrated pin protection on receptacle connector
- Proven contact mating beam geometries with 2-pts of contact



BENEFITS

- Impedance matched for optimal peformance
- Quality and Reliability
- Supports multiple connector applications
- Durable mating interface design eliminates bent pins
- Reliable peformance through shock and vibration

TECHNICAL INFORMATION

MATERIAL

- Housing: Liquid crystal polymer
- Contact Base Metal: Copper alloy
- Solder Spheres: 95.5Sn/4Ag/0.5Cu

ELECTRICAL PERFORMANCE

- Insulation Resistance: 1000MΩ min
- Dielectric withstanding voltage: 2000V AC max 1.5A < 30°C ∆ T (all contacts energized)

MECHANICAL PERFORMANCE

- Durability: 200 mating cycles
- Contact Wipe: 1.0mm nominal

ENVIRONMENTAL

- Pb Free
- Be Free

PACKAGING

■ Tape and Reel

TARGET MARKETS/APPLICATIONS



Router and Servers Data Center Network



Telecom
Datacom
Switches and Routers



Car Navigation Systems



Imaging

PART NUMBERS

DESCRIPTION

M-Series™ 56 Receptacle, 4mm, 4 Pair x 12-40 Column

M-Series™ 56 Plug, 0mm, 4 Pair x 12-40 Column

M-Series™ 56 Plug, 1mm, 4 Pair x 12-40 Column

PRODUCT FAMILY DRAWING

10154179c

10154178c

10154425c



Gaming Machine Test Equipment



Entertainment PC

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