

Precision Compression-Mount Microwave Test Connectors



Molex's Precision Compression-Mount Microwave Test Connectors optimize design flexibility and reduce installation time while achieving up to 65 GHz analog performance over 20 Gbps



Precision Compression-Mount Microwave Test Connectors

Features and Advantages

1.85mm version 65 GHz analog signals

Provides high-bandwidth performance for high-speed (over 20 Gbps) digital test boards. The only 65 GHz compression-mounted connector on the market

2.92mm version 40 GHz analog signals

Provides a lower-cost alternative over the 1.85 and 2.4mm version including associated accessories, terminations and adapters

Unique compression-mount design using two 0-80 UNF screws

Reduces installation time by eliminating soldering from the process. Accommodates board thicknesses 0.57 to 2.79mm; more options available upon request. Provides a continuous ground connection between the connector and PCB

1.85mm, 2.4mm and 2.92mm mating interfaces

Offers compatibility with network analyzer cables

Vertical-mount design

Increases density by enabling more test connectors to be placed around the Device Under Test (DUT) versus competitor's solder-mount processes. Facilitates placement anywhere on the PCB for testing flexibility

Integrated center pin design

Optimizes interface dimensions after mounting to the PCB. Provides low reflections for accurate measurements

Durable stainless-steel body

Withstands over 500 mating cycles

Applications

Datacommunication and

Telecommunication Applications

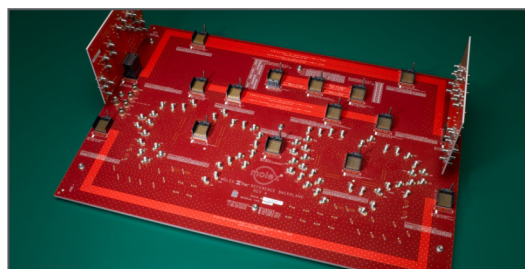
Test and Characterization Boards

Reference Backplanes

High-Speed Backplanes

Test and Measurement Equipment

Chip Manufacturers



Reference Backplane

Precision Compression-Mount Microwave Test Connectors



Specifications

REFERENCE INFORMATION

Packaging: Tray
 Mates With: 1.85mm, 2.4mm or 2.92mm Male Plug
 (available on the customer's test equipment cable end)
 Designed In: Millimeters
 RoHS: Yes
 Halogen Free: Yes

MECHANICAL

Mating Force (max.): .23N
 Durability (min.): 500 cycles

ELECTRICAL

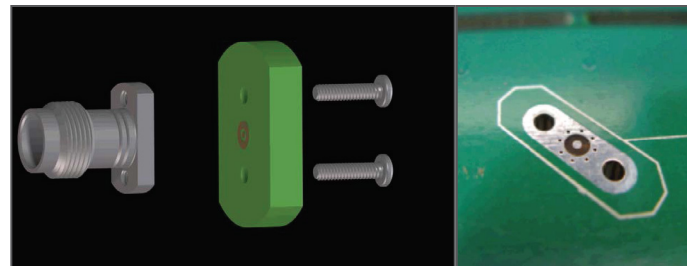
Contact Resistance:
 Center Contact — <3 mΩ
 Outer Contact — <2 mΩ
 Dielectric Withstanding Voltage:
 500V RMS
 Insulation Resistance:
 5,000 Megohms
 Voltage Standing Wave Ratio (max.):
 DC to 26.5 GHz — 1.10
 26.5 to 40 GHz — 1.20
 40 to 50 GHz — 1.30
 (2.4mm and 1.85mm only)
 RF Leakage: <-100dB
 RF Insertion Loss (max.):
 0.03 x √f (GHz) dB

PHYSICAL

Housing: Stainless Steel Passivated
 Contact: Beryllium Copper
 Plating:
 Center Contact — Gold (Au) over Nickel (Ni)
 PCB Thickness:
 0.57 to 2.79mm = standard;
 more options available upon request
 Operating Temperature: 0 to +165 °C

Additional Product Features

Innovative design includes two 0-80 UNF screws for mounting the receptacle to the PCB, eliminating soldering



Mounting method illustration depicting two 0-80 UNF screws for mounting the receptacle to the PCB, eliminating soldering

Actual launch pad on which the connector mounts

Ordering Information

Order No.	Interface Style	Mounting Screw Length
73157-0000	1.85mm	None
73157-0001		4.76mm
73157-0002		6.35mm
73387-0020	2.40mm	4.76mm
73387-0021		6.35mm
73387-0022		None
73252-0090	2.92mm	4.76mm
73252-0091		6.35mm
73252-0092		None
73251-1850	SMA	None
73251-1851		4.76mm
73251-1853		6.35mm

www.molex.com/link/precision.html