

SMPM RF Blind-Mate Connectors



Delivering high density and excellent frequency performance, SMPM RF Blind-Mate Connectors reduce system weight, increase system density and increase manufacturability through the use of multiport connectors

Features and Advantages

30% smaller than SMP designs	Ideal for compact applications requiring a high level of density
Frequency range of DC to 65 GHz	Designed for military and high-frequency applications. MIL-PRF-39012 compliant
Negligible Voltage Standing Wave Ratio (VSWR) degradation	Allows PCB designers additional tolerance stack. Compensates for axial misalignment up to 0.25mm
Blind-mate female interface	Self-aligns to withstand radial and axial misalignment inherent with board-to-board mating. Delivers excellent electrical performance without degradation throughout multiple mating cycles. Male catcher's mitt interface available for additional radial misalignment compensation
Custom bullet lengths available upon request	Enable custom board-to-board stack-height requirements
Multi-port configurations are available upon request	Reduces manufacturing time and reduces tolerance stack up. 3.56mm center-to-center spacing available
Push-on design	Eliminates the use of threads or wrenches during installation



SMPM RF Blind-Mate Interconnect System Components

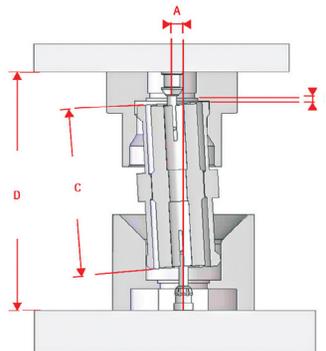
Applications

Military and Aerospace

- UAVs
- Radar
- Jammers

Test and Measurement Equipment

- Input/Output



Axial and Radial Misalignment

Legend:

- A: Radial Misalignment
- B: Axial Misalignment
- C: Bullet Height
- D: Board-to-Board Distance

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Specifications

REFERENCE INFORMATION

Packaging: Single bag, tape and reel
Mates With: SMPM only
Designed In: Millimeters
Industry Standard: MIL-STD-348
RoHS: Yes
Halogen Free: Yes

ELECTRICAL

Voltage (max):
Sea Level — 217Vrms
70K Feet — 42Vrms
Impedance: 50 Ohms
Frequency Range: DC to 65 GHz
VSWR:
1.10 — DC to 23 GHz
1.15 — 23 to 26 GHz
1.35 — 26 to 50 GHz
Contact Resistance (max.):

Center — 6.0 milliohms
Outer — 2.0 milliohms
Dielectric Withstanding Voltage: 325Vrms
Insulation Resistance: \geq 5000 Megohms

MECHANICAL

Center Contact Retention:
1.5lbs axially (captivated designs)
Force to Engage/Disengage:
Engagement Force (max):
Full Detent — 8lbs
Smooth Bore — 4lbs
Disengagement Force (min):
Full Detent — 3lbs
Smooth Bore — 0.5lbs
Durability (min.):
Full Detent — 100 Cycles
Smooth Bore — 500 Cycles

PHYSICAL

Housing:
Female Interfaces: BeCu
Male Interfaces: BeCu, Brass,
Kovar or Stainless Steel
Contact: BeCu
Plating: Gold over Nickel
Operating Temperature: -65 to +165°C

Ordering Information

Series No.	Component
73300	Subminiature Blind-Mate RF Connectors

www.molex.com//link/rfmicrowavecoax.html

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