

# 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

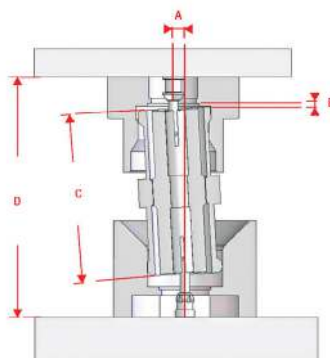
## Applications

### 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

# SMPM RF Blind-Mate Connectors



## 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

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