



**Delivering high density and excellent frequency performance, SMPM RF Blind-Mate Connectors reduce system weight in comparison to larger connectors and increase manufacturability with the use of multiport connectors**

## SMPM RF Blind-Mate Connectors

**73300** Subminiature Blind-Mate Connectors

### Features and Benefits

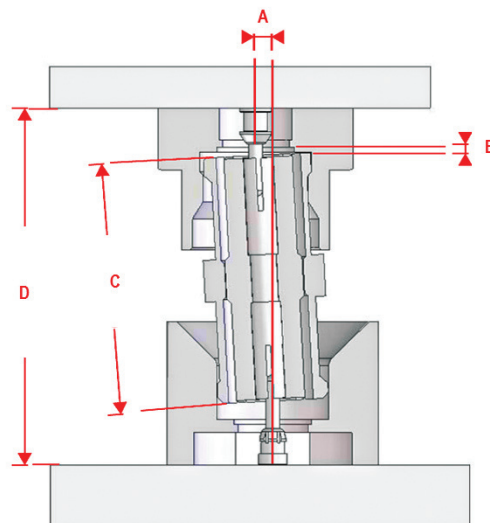
30% smaller than SMP designs	Ideal for compact applications requiring a high level of density
Frequency range of DC to 65 GHz	Designed for military and high-frequency applications. MIL-PRF-39012 compliant
Negligible Voltage Standing Wave Ratio (VSWR) degradation	Allows PCB designers additional tolerance 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

### Specifications

#### Reference Information

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

#### Electrical

Voltage (max):  
Sea Level — 275Vrms  
70K Feet — 85Vrms  
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: 500Vrms  
Insulation Resistance:  $\geq$  5000 Megohms

#### Mechanical

Center Contact Retention:  
0.68 kg axially (captivated designs)  
Force to Engage/Disengage:  
Engagement Force (typical):  
Full Detent — 2.41 kg  
Smooth Bore — Beryllium copper  
(BeCu) 1.13 kg  
Disengagement Force (typical):  
Full Detent — 2.95 kg  
Smooth Bore — 0.68 kg  
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
<a href="#">73300</a>	Subminiature Blind-Mate RF Connectors