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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantage</th>
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</thead>
<tbody>
<tr>
<td>30% smaller than SMP designs</td>
<td>Ideal for compact applications requiring a high level of density</td>
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<tr>
<td>Frequency range of DC to 65 GHz</td>
<td>Designed for military and high-frequency applications. MIL-PRF-39012 compliant</td>
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<tr>
<td>Negligible Voltage Standing Wave Ratio (VSWR) degradation</td>
<td>Allows PCB designers additional tolerance stack. Compensates for axial misalignment up to 0.25mm</td>
</tr>
<tr>
<td>Blind-mate female interface</td>
<td>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</td>
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<tr>
<td>Custom bullet lengths available upon request</td>
<td>Enable custom board-to-board stack-height requirements</td>
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<tr>
<td>Multi-port configurations are available upon request</td>
<td>Reduces manufacturing time and reduces tolerance stack up. 3.56mm center-to-center spacing available</td>
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<tr>
<td>Push-on design</td>
<td>Eliminates the use of threads or wrenches during installation</td>
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</tbody>
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Applications

Military and Aerospace
- UAVs
- Radar
- Jammers

Test and Measurement Equipment
- Input/Output

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

Axial and Radial Misalignment
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: >= 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

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
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<tbody>
<tr>
<td>73300</td>
<td>Subminiature Blind-Mate RF Connectors</td>
</tr>
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</table>

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

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