SMB Plug Dummy Load - 50 Ohm and 75 Ohm

<table>
<thead>
<tr>
<th>FREQ. RANGE</th>
<th>GOLD PLATED</th>
<th>NICKEL</th>
<th>RESISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 GHz</td>
<td>131-3801-811</td>
<td>131-3801-816</td>
<td>50 ohm</td>
</tr>
<tr>
<td>0-1 GHz</td>
<td>131-3801-821</td>
<td>131-3801-826</td>
<td>75 ohm</td>
</tr>
</tbody>
</table>
SMB - 50 Ohm Connectors

Specifications

**ELECTRICAL RATINGS**

**Impedance:** 50 ohms

**Frequency Range:**
- Connectors: 0-4 GHz
- Dummy loads: 0-1 GHz
- Uncabled receptacles, adapters, and dummy loads: N/A

**VSWR:**
- Straight Cable: 1.30 + .04f
- Right Angle Cable: 1.45 + .06f

**RG-178 Cable:** 1.20 + .04f

**Working Voltage:**
- Uncabled receptacles, dummy loads: N/A
- Adapters: 1.20 + .04f
- RG-316, RG-58, .086 semi-rigid cable: 1.25 + .04f, 1.35 + .04f

**Insertion Loss:**
- Connectors: 0-4 GHz
- Straight cable connectors: 0.30 dB
- Right angle cable connectors: 0.60 dB
- Uncabled receptacles, adapters, and dummy loads: N/A

**Contact Resistance:**
- Straight cable connectors: 1000 megohms minimum
- Right angle cable connectors: 1000 megohms minimum

**Insulation Resistance:**
- Straight cable connectors: 1000 megohms minimum
- Right angle cable connectors: 1000 megohms minimum

**Dielectric Withstanding Voltage:**
- Uncabled receptacles, adapters, and dummy loads: N/A
- Connectors: 1000 volts minimum
- Connectors for RG-178: 750 Vrms minimum
- Connectors for RG-316, RG-58, .086 semi-rigid: 500 Vrms minimum
- Dummy loads: 335 volts minimum

**Cable Retention:**
- Uncabled receptacles, adapters, and dummy loads: 1000 N/A
- Connectors for RG-178: 10 N/A
- Connectors for RG-316: 20 N/A
- Connectors for RG-58: 40 N/A
- Connectors for RG-178: 30 N/A

**RF High Potential Withstanding Voltage:**
- Connectors for RG-178: 500 Vrms minimum
- Connectors for RG-316, RG-58: 700 Vrms minimum
- Uncabled receptacles and adapters: 600 Vrms minimum
- Dummy loads: N/A

**MECHANICAL RATINGS**

**Engagement Design:** MIL-C-39012, Series SMB

**Engagement/Disengagement Force:**
- 2 pounds min to 14 pounds

**Contact Retention:**
- 4 lbs. min axial force (captivated contacts)
- 1 inch-ounce min torque (uncabled receptacles)

**Cable Retention:**
- Uncabled receptacles, adapters: N/A
- Connectors: 10 N/A
- Dummy loads: 20 N/A

**RF Potential Retention:**
- Uncabled receptacles, adapters: N/A
- Connectors: 10 N/A
- Dummy loads: N/A

**Notes**
1. ID of contact to meet VSWR mating characteristics and connector durability when mated with a .019 .03 male contact.
2. Must meet the force to engage and disengage when mated with mating part.

**MATING ENGAGEMENT FOR SMB SERIES PER MIL-C-39012**

**ENVIRONMENTAL RATINGS**

**Dielectric Withstanding Voltage:**
- Uncabled receptacles, adapters and dummy loads: N/A
- Connectors: 1000 volts minimum
- Connectors for RG-178: 750 Vrms minimum
- Connectors for RG-316, RG-58, .086 semi-rigid: 500 Vrms minimum
- Dummy loads: 335 volts minimum

**Contact Retention:**
- Uncabled receptacles, adapters and dummy loads: 1000 N/A
- Connectors: 10 N/A
- Connectors for RG-178: 20 N/A
- Connectors for RG-316: 40 N/A
- Connectors for RG-58: 30 N/A
- Connectors for RG-178: 16 N/A

**Duraibility:**
- 500 cycles minimum

**MATERIAL SPECIFICATIONS**

**Bodies:**
- Brass per QQ-B-626 or zinc per ASTM B66-71, gold plated** per MIL-G-45204 .00001 min or nickel plated per QQ-N-290
- Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204 .00003 min.
- Female - phosphor bronze per QQ-B-750, gold plated per MIL-G-45204 .0001" min. or nickel plated per QQ-N-290

**Expansion Caps:**
- Brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
- Female - brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

**Crimp Sleeves:**
- Copper per WW-T-779, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
- Female - brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

**Mounting Hardware:**
- Brass (nuts) per QQ-B-613 or phosphor bronze (lockwashers) QQ-B-750, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

**Cover Rings:**
- Phosphor Bronze per QQ-B-750, gold plated per MIL-G-45204 .00001 min. or nickel plated per QQ-N-290

---

† Avoid user injury due to misapplication. See safety advisory definitions inside front cover.

**Notes**
1. ID of contact to meet VSWR mating characteristics and connector durability when mated with a .019 .03 male contact.
2. Must meet the force to engage and disengage when mated with mating part.