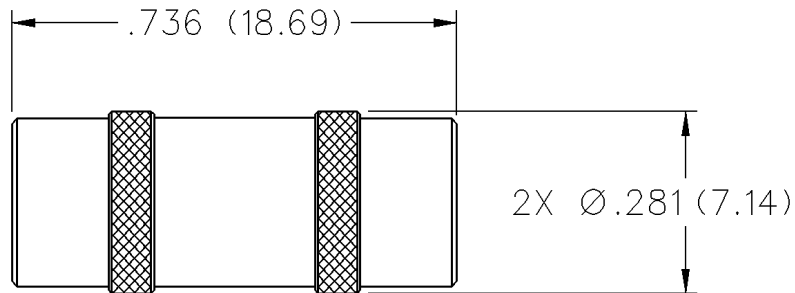


75 Ohm SMB Plug to Plug Adapter



INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



| |
|--------------------|
| GOLD PLATED |
| 131-8901-811 |

Mini-75 Ohm SMB Connectors



Specifications

INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

ELECTRICAL RATINGS

Impedance: 75 ohms

Frequency Range: 0-2 GHz

VSWR: f = GHz

RG-179, RG-59, Belden 735A cable:

| | |
|---|-------------|
| Straight cabled connectors | 1.25 + .04f |
| Right angle cabled connectors | 1.35 + .04f |
| Adapters | 1.20 + .04f |
| Type N Adapters | 1.05 + .01f |
| Matching pad 50 ohm/75 ohm | 1.05 + .1f |
| Loads | 1.05 + .01f |
| Uncabled receptacles, opens, shorts | N/A |

Working Voltage: (Vrms maximum)†

| Connectors for Cable Type | Sea Level | 70K Feet |
|---|-----------|----------|
| RG-179, RG-59, Belden 735A, uncabled receptacles, adapters | 335 | 85 |
| Open, shorts, loads, matching pad | N/A | N/A |

Dielectric Withstanding Voltage: (VRMS minimum at sea level)†

| | |
|--|------|
| Connectors for RG-179, RG-59, Belden 735A, uncabled receptacles, adapters | 1000 |
| Open, shorts, loads, matching pad | N/A |

Corona Level: (Volts minimum at 70,000 feet)†

| | |
|--|-----|
| Connectors for RG-179, RG-59, Belden 735A | 250 |
| Uncabled receptacles, adapters, open, shorts, loads, matching pad: | N/A |

Electrical Length: Open ± 1.5° (± 5.2° relative to short)

Short ± 1.5° (± 5.2° relative to open)

Adapters ± 5.2° (N/A for Jack-Bulkhead Jack and N Types)

Insertion Loss: (dB maximum, tested at 1.5 GHz)

| | |
|--|--------------|
| Straight cable connectors | 0.30 dB |
| Right angle cable connectors | 0.60 dB |
| Matching pad | 6 dB nominal |
| Uncabled receptacles, adapters, opens, shorts, loads | N/A |

Insulation Resistance: 1000 megohms minimum

| Contact Resistance: | Initial | After Environmental |
|--|---------|---------------------|
| Center contact (straight cabled connectors, uncabled receptacles, opens, shorts, loads) | 6.0 | 8.0 |
| Center contact (right angle cabled connectors and adapters) | 12.0 | 16.0 |
| Outer contact (gold plated connectors) | 1.0 | 1.5 |
| Outer contact (nickel plated connectors) | 2.5 | 3.5 |
| Braid to body (gold plated connectors) | 1.0 | N/A |
| Braid to body (nickel plated connectors) | 2.5 | N/A |

RF Leakage: (dB minimum tested at 2.5 GHz)

| | |
|---|--------|
| Cable connectors | -55 dB |
| Uncabled receptacles, adapters opens, shorts, loads, matching pad | N/A |

RF High Potential Withstanding Voltage: (Vrms minimum, tested at 4 and 7 MHz)†

| | |
|---|-----|
| Connectors for RG-179, RG-59, Belden 735A | 700 |
| Uncabled receptacles and adapters | 600 |
| Opens, shorts, loads, matching pad | N/A |

Power Rating: (Loads and matching pad only) 1.0 watt at +25°C derated linearly to .5 watt at +125°C

MECHANICAL RATINGS

Engagement Design: MIL-C-39012, Series SMB

Engagement/Disengagement Force: 2 pounds minimum to 14 pounds maximum axial force

Contact Retention: 4 lbs. minimum axial force (captivated contacts)

1 inch-ounce minimum torque (uncabled receptacles)

Cable Retention:

| | Axial Force* (pounds) | Torque (in-oz) |
|--|--------------------------|-------------------|
|--|--------------------------|-------------------|

| | | |
|--|----|-----|
| Connectors for RG-179, Belden 735A | 20 | N/A |
| Connectors for RG-59 | 40 | N/A |

* or cable breaking strength whichever is less.

Durability: 500 cycles minimum

ENVIRONMENTAL RATINGS (Meets or exceed the applicable paragraph of MIL-C-39012)

Temperature Range: - 65°C to +165°C -- Connectors and adapters

- 65°C to +125°C -- Loads, matching pad

20°C to 26°C -- Opens, shorts

Thermal Shock: MIL-STD-202, Method 107, Condition B

(N/A opens, shorts, loads, matching pad)

Corrosion: MIL-STD-202, Method 101, Condition B

(N/A opens, shorts, loads, matching pad)

Shock: MIL-STD-210, Method 213, Condition B

(N/A opens, shorts, loads, matching pad)

Vibration: MIL-STD-202, Method 204, Condition B

(N/A opens, shorts, loads, matching pad)

Temperature Coefficient: (Loads only) ± 300 ppm/°C

MATERIAL SPECIFICATIONS

Bodies: Brass per QQ-B-626, gold plated** per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

N type adapters stainless steel per QQ-S-763, passivated per MIL-F-14072

Contacts: Male & Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204 .00003" min.

Insulators: PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457

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

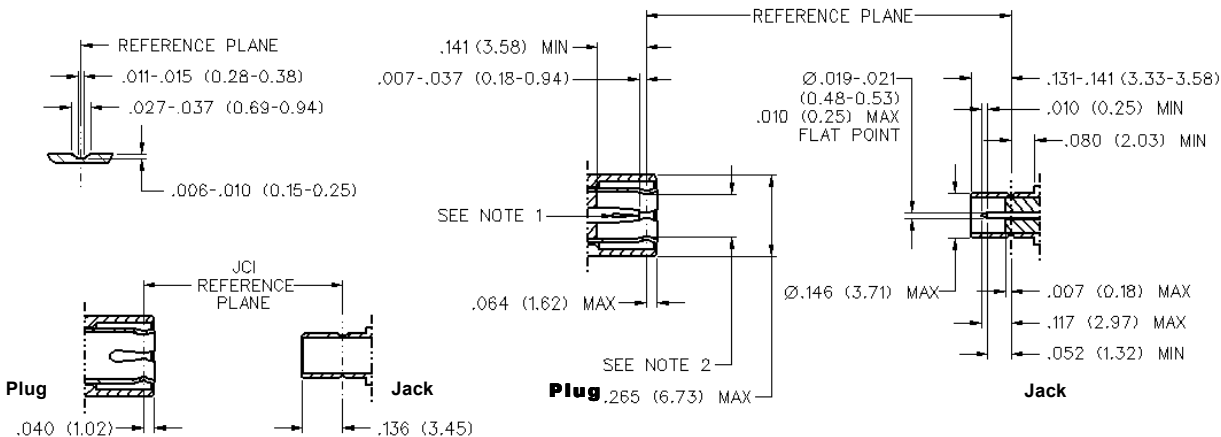
Crimp Sleeves: Copper per WW-T-799, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Mounting Hardware: Brass (nuts) per QQ-B-626 or phosphor bronze (lockwashers) QQ-B-750, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

** All gold plated parts include a .00005" min. nickel underplate barrier layer.

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

MATING ENGAGEMENT FOR MINI-75 OHM SMB SERIES (INTERMATEABLE WITH STANDARD 50 OHM SMB)



- NOTES:
1. ID of contact to meet VSWR, mating characteristics and connector durability when mated with a dia .019-.021 (0.48/0.53) male contact.
 2. Must meet the force to engage and disengage when mated with mating part.