

NEW PRODUCT RELEASE NEW PRODUCT RELEASE NEW PRODUCT RELEASE NEW PRODUCT RELEASE

MINI 75Ω SMB CONNECTORS



Mini 75 ohm SMB Connectors

Amphenol introduces the Mini 75 ohm SMB connector family. Mini 75 ohm SMB provides broadband capability through 2 GHz. Its snap-on design utilizes die cast components on non-critical areas to provide a low cost solution.

The Mini 75 ohm SMB offers snapfit mating for quick connect/disconnect. The reduced housing allows circuit miniaturization and efficient "real estate" utilization. Built in accordance with requirements of Mil-C-39012, the interface is in compliance with Mil-STD 348 and is interchangeable with Industry Standard for Miniature 75 ohm SMB.

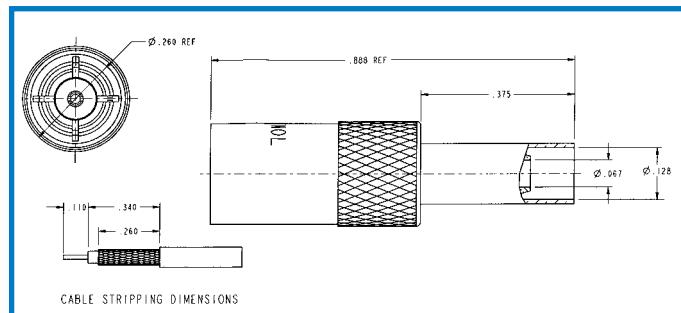
Applications:

- Telecommunications
- Switching Equipment
- Networking

Ordering Information

| Part No. | Cable Size | Description |
|--------------|------------|--------------------|
| 903-600P-71S | RG-179 | Straight Plug |
| 903-605P-71S | RD-179 | Straight Plug |
| 903-598P-71S | 735A | Straight Plug |
| 903-586P-71A | RG-179 | R/A Plug |
| 903-599P-71A | RD-179 | R/A Plug |
| 903-588P-71A | 735A | R/A Plug |
| 903-604J-71S | RG-179 | Straight Blkh Jack |
| Leg Length | | |
| 903-601J-71P | .110 | R/A PCB Jack |
| 903-581J-71P | .155 | Straight PCB Jack |

903-600P-71S Plug



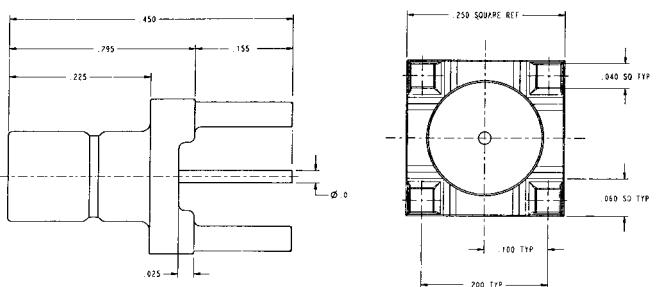
Features

| |
|-------------------------------|
| 75 ohm snap-on coupling. |
| Same interface as 50 ohm SMB. |
| Diecast components. |

Benefits

| |
|---|
| Allows quick installation. |
| Maintains same "real estate" with enhanced impedance. Product interchangeable with competitors. |
| Offers low cost solution. |

Mini 75Ω SMB Connector



903-581J-71P Jack



903-586P-71A

Specifications:

Environmental:

| | |
|-------------------|--|
| Temperature range | -65°C to +165°C |
| Thermal shock | MIL-STD-202 method 107 (test cond. B) except high temp test @ +200°C |
| Vibration | MIL-STD-202 method 204, snap-on (test cond. B) (15 G's) |
| Shock | MIL-STD-202 method 213, snap-on (test cond. B) 75 G's @ 6 milliseconds 1/2 sine. |
| Corrosion | MIL-STD-202 method 101 (test cond. B) 5% salt solution. |

Mechanical:

| | |
|-----------------------------------|--|
| Mating | Mini 75 ohm snap on coupling |
| Engagement forces | Initial 14 lbs. max.engagement. After 500 matings, 14 lbs. max engagement and disengagement. 2 lbs. min.disengagement. |
| Connector affixment to cable | Braid and jacket: hex crimp. |
| Cable affixment to center contact | Solder |
| Contact captivation | All types, except as noted |
| Cable retention | Equal to breaking strength of cable employed |
| Connector durability | 500 mating and unmating cycles min. |

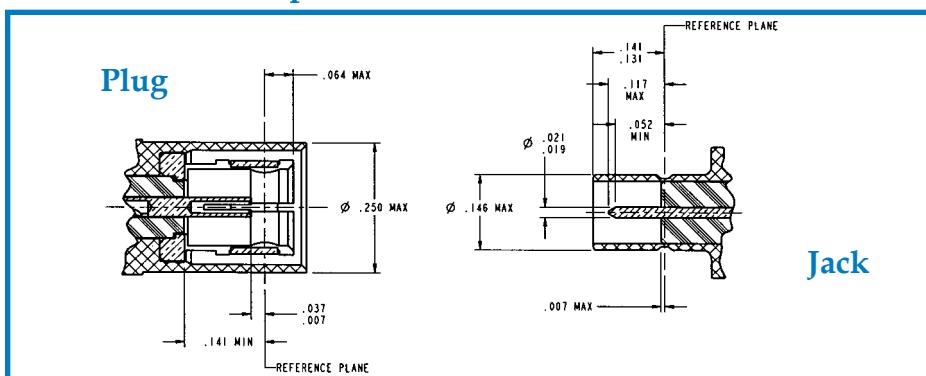
Material:

| | |
|-----------------|--|
| Bodies | Brass per QQB-626 or zinc per ASTM B86-71 as specified, nickel (or gold) plated as listed |
| Center contacts | Female: Copper alloy spring material, beryllium copper or equivalent, gold plate Male: Brass or beryllium |
| Outer contact | Brass, nickel plate |
| Crimp ferrules | Annealed copper alloy |
| Insulators | TFE |

Electrical:

| | |
|---|---|
| Impedance | 75Ω |
| Frequency range | 0-2 GHz with low reflection |
| Voltage rating for RG-188/U cables | Sea level: 335 volts 70,000 ft: 85 volts |
| Dielectric withstanding voltage | 750 VRMS for RG-179 type |
| VSWR RG-179/U Series cables | Straight connectors 1.33 max. Rt. angle connectors 1.43 max. |
| Contact Resistance Center contact Outer contact | Initial, 6.0 mΩ; After environmental, 8.0 After environmental, 1.5 initial, 1.0 mΩ |
| Braid to body | After environmental, N/A |
| Insulation resistance | 1000 MΩ min. |
| RF leakage | -55 dB min. @ 2 GHz |
| Insertion loss | Straight connectors 0.30 dB @ 1.5 GHz Rt. angle connectors 0.60 dB @ 1.5 GHz |

Mini 75Ω SMB Interface Specifications



Amphenol®

One Kennedy Avenue
Danbury, Connecticut 06810
Telephone: (203) 743-9272
Fax: (203) 796-2032
www.amphenolrf.com

AMPHENOL RF - GLOBAL RF SOLUTIONS