

SMB Dual-Crimp Cable Plugs



These SMB plugs feature crimp center contacts for fast assembly, with reduced size and weight compared to standard SMB cable plugs.

Other features include:

- 50 ohm or 75 ohm impedance.
- For single or double-shielded cables.
- Gold-plated captive contact.
- Nickel plated body and crimp sleeve.
- Fast delivery from stock.



Ordering Information

Figure 1 (50 ohm)

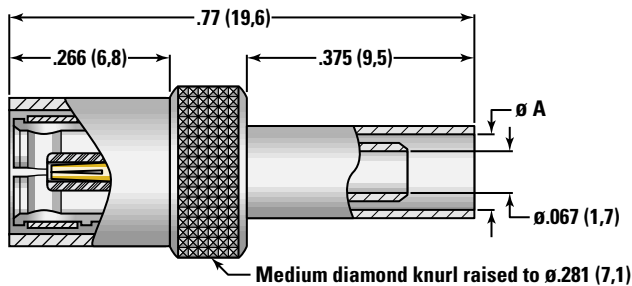
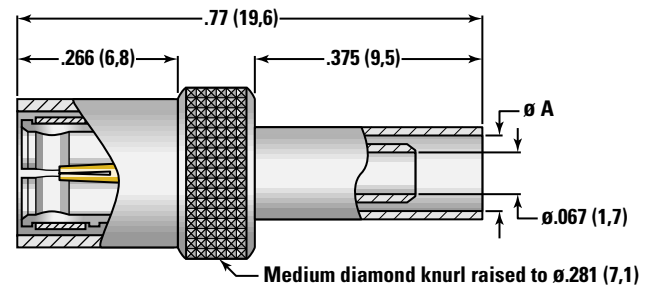


Figure 2 (75 ohm)



SMB Dual-Crimp Cable Plugs				
Impedance	Cable	A	Figure	AEP P/N
50 ohm	RG-316	.122	1	2007-7721-003
50 ohm	RG-316DS	.130	1	2007-7721-019
75 ohm	RG-179	.122	2	8802-7721-079
75 ohm	RG-179DS	.130	2	8802-7721-085

See next page for specifications and assembly instructions.



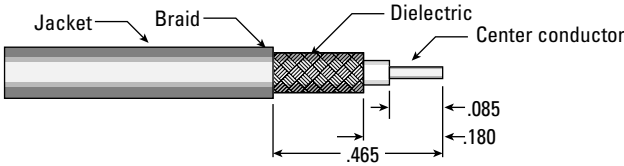
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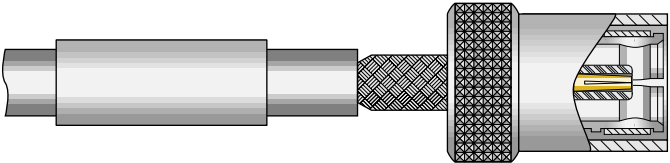
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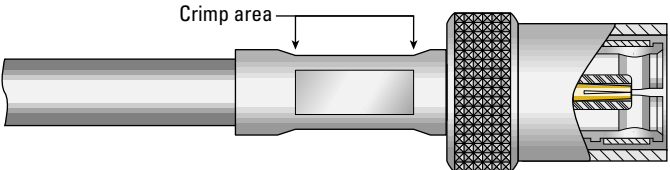
Assembly Instructions

- 1 —Trim cable as shown.
—Slide crimp sleeve over cable.


- 2 —Place contact onto cable center conductor, with back of contact flush with end of cable dielectric.
—Crimp contact to center conductor (see below for tool information).
—Flare cable braid by rotating dielectric.


- 3 —Insert cable / contact assembly into body until contact snaps into place. Ensure that braid wires are outside crimp tail of body.


- 4 —Slide crimp sleeve forward to touch rear of body, and crimp using .128" hex die.



Contact crimp tool: AEP P/N AT-126-1, setting 3. Braid crimp tool: AEP P/N TA-0105.

Specifications (MIL-PRF-39012 as applicable, for 50 ohm connectors)

Materials:

Body components, male contacts: Brass per ASTM-B16, alloy 360, 1/2 hard.

Female contacts: Beryllium copper per ASTM-B196, Condition HT. **Insulators:** Teflon TFE per ASTM-D1710.

Finish:

Center contacts: Gold plated per current revision of MIL-PRF-39012*

Other metal parts: Gold or nickel plated to meet current MIL-PRF-39012 corrosion requirements.*

Electrical:

Impedance: 50Ω. **Frequency range:** DC–4 GHz. **Insulation Resistance:** 1,000 megohms minimum.

Voltage Rating: 250VRMS @ sea level (RG-178 cable); 335VRMS @ sea level (RG-316 cable).

Dielectric Withstanding Voltage: 750VRMS @ sea level (RG-178 cable); 1000VRMS @ sea level (RG-316 cable).

Contact Resistance: Straight connectors: Initial: 6 milliohms maximum; after environmental test conditions: 8 milliohms maximum.
Right angle connectors: Initial: 12 milliohms maximum; after environmental test conditions: 16 milliohms maximum.

Corona level: 125V @70,000 ft. **RF highpot:** 400 VRMS @ 5 MHz.

RF leakage: -55 dB min @ 2–3 GHz. **Insertion loss:** .30 dB max (straight connectors), .60 dB max (right angle connectors) @ 1.5 GHz.

VSWR: Cable	Straight connector	Right angle connector
RG-178	$1.30 + (.04 \times F[\text{GHz}])$	$1.45 + (.06 \times F[\text{GHz}])$
RG-316	$1.25 + (.04 \times F[\text{GHz}])$	$1.35 + (.04 \times F[\text{GHz}])$

Mechanical:

Force to engage: 14 pounds max. **Contact retention:** 2 pounds min axial force. **Durability:** 500 mating cycles.

Environmental (MIL-STD-202):

Temperature range: -65° C to +165° C. **Corrosion:** Method 101, condition B, 5% salt solution. **Vibration (Method 204):** Condition B.

Mechanical shock (Method 213): Condition B. **Thermal shock (Method 107):** Condition B.

*These specifications change periodically with updates to MIL-PRF-39012 requirements. Contact factory for latest specifications.



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