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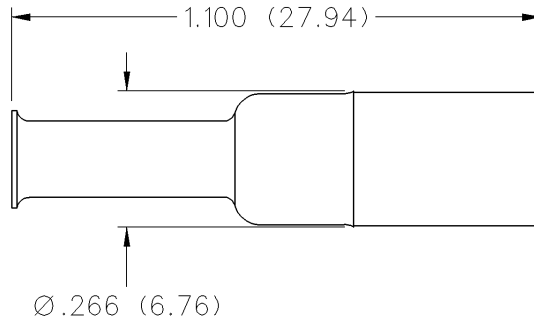
For any questions, you can email us directly:
sales@integrated-circuit.com

SMB Non-Magnetic RF Connectors

For Flexible Cable

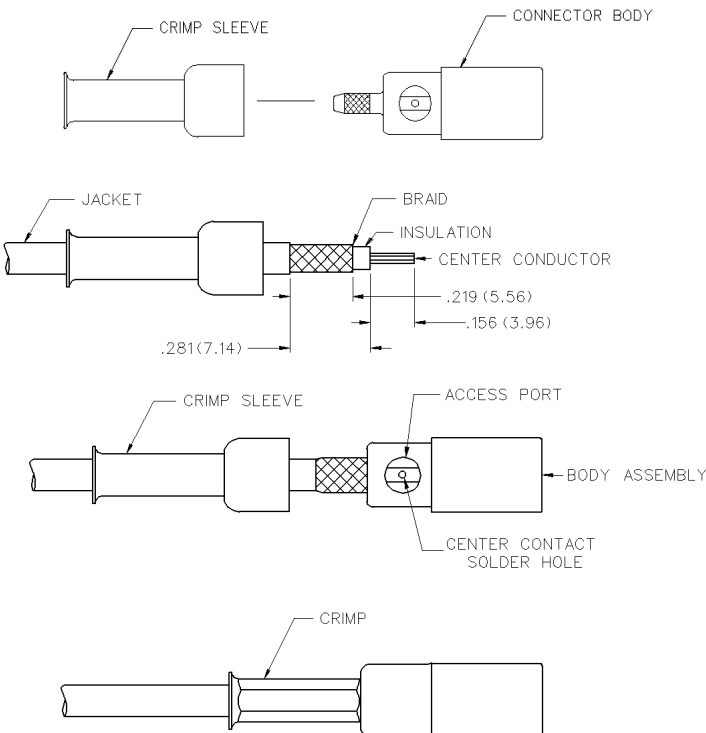
INCHES (MILLIMETERS)
 CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

Straight Crimp Type Plug - Solder or Crimp Captivated Contact



CABLE TYPE	GOLD PLATED
RG-316DS, 188 DS, 179 DS, 187 DS	131-9404-001

SMB Straight Crimp Type Straight Plugs For Flexible Cable



CABLE GROUP	PART NUMBER	CRIMP HEX
RG-316/u, 188, 174, 179, 187	131-9403-001	.128 (3.25)
RG-316 DS, 188 DS, 179 DS, 187 DS	131-9404-001	.151 (3.83)

1. Identify connector parts. (2 piece parts)
2. Strip cable to dimensions shown. Do not nick braid or center conductor. A wire stripper of correct size is recommended for this step. Twist stranded center conductor into tight bundle and tin. Slide crimp sleeve onto cable as shown.
3. Flare braid and slide cable into body making certain that the cable insulation bottoms in center contact.

Solder Attachment: Solder center conductor to contact through the side access ports and hole in center contact. Use a minimum amount of solder for a full fillet joint. **.020 (0.51) diameter solder is recommended.**

Crimp 50 Ohm connector contacts with 141-0000-911 die set in 144-900 tool frame. Crimp 75 Ohm connector contacts with 141-0000-924 die set in 144-0000-900 tool frame.



SMB Non-Magnetic RF Connectors Cable Assembly Instructions

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ELECTRICAL RATINGS

Impedance: 50 ohms

Frequency Range: 0-4 GHz

VSWR: (f = GHz)

	Straight Cabled	Right Angle Cabled
RG-316	1.25 + .04f	1.35 + .04f
Uncabled receptacles	N/A	

Working Voltage: (Vrms maximum)

Connectors for Cable Type	Sea Level	70K Feet
RG-316, uncabled connectors	335	85

Dielectric Withstanding Voltage: (VRMS minimum at sea level)

Connectors for RG-316, uncabled receptacles	1000
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Corona Level: (Volts minimum at 70,000 feet)

Connectors for RG-316	250
Uncabled receptacles	N/A

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

Straight cable connectors	0.30 dB
Right angle cable connectors	0.60 dB
Uncabled receptacles	N/A

Insulation Resistance: 1000 megohms minimum

Contact Resistance: (milliohms maximum) Initial After Environmental

Center contact (straight cabled connectors and uncabled receptacles)	6.0	8.0
Center contact (right angle cabled connectors)	12.0	16.0
Outer contact (gold plated connectors)	1.0	1.5
Braid to body (gold plated connectors)	1.0	N/A

RF Leakage: (dB minimum tested at 2.5 GHz)

Cable connectors	-55 dB
Uncabled receptacles	N/A

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

Connectors for RG-316	700
Uncabled receptacles	600

Power Rating (Dummy Load): 0.5 watt @ +25°C, derated to 0.25 watt @ +125° C

MECHANICAL RATINGS

Engagement Design: MIL-STD-348, Series SMB

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

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

Cable Retention:	Axial Force* (pounds)	Torque (in-oz)
Connectors for RG-316	20	N/A

*or cable breaking strength whichever is less.

Durability: 500 cycles minimum

ENVIRONMENTAL RATINGS

(Meets or exceeds the applicable paragraph of MIL-PRF-39012)

Temperature Range: - 65°C to + 165°C

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

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

Shock: MIL-STD-202, Method 213, Condition B

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