

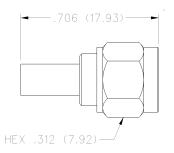
SMA Non-Magnetic RF Connectors

For Flexible Cable

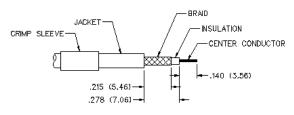
Straight Crimp Type Plug (3-piece) - Captivated Contact

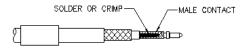


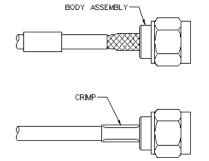
CABLE TYPE	VSWR & FREQ. RANGE	GOLD PLATED
RG-58/u, 141	1.15 + .01f (GHz) 0-12.4 GHz	142-9407-001



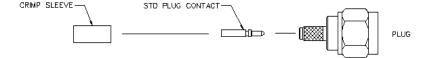
SMA Type Straight Plugs For Flexible Cable - Crimp or Solder Contacts







CABLE GROUP	PART NUMBER	CRIMP HEX
RG-316/u, 188, 174	142-9403-011	.128 (3.25)
RG-316 DS, 188 DS	142-9404-011	.151 (3.83)
RG-58/u, 141	142-9407-011	.213 (5.41)



- 1. Identify connector parts. (3 piece parts)
- 2. Strip cable to dimensions shown. Do not nick braid or center conductor. Tin center conductor if contact will be solder attached. Do not tin center conductor if contact is to be crimp attached. When stripping LMR-100 low loss cable, remove foil back to where cable jacket is stripped. A wire stripper of correct size is recommended for this step. Slide heat shrink (as applicable) and crimp sleeve onto jacket of cable.
- 3. Assemble contact onto cable as shown.

Solder Attachment: Solder contact to center conductor through solder hole using .020 (0.51) diameter solder. Use a minimum amount of solder for a good joint.

Crimp Attachment: Crimp contact to center conductor using Johnson Components[™] Hand Tool 144-0000-910, setting #2, with positioner 141-0000-907. Crimp location should be centered between end of contact and X-hole. Crimp attachment to solid center conductor cables is not recommended.

4. Flare braid and slide body assembly over contact and under braid. Then seat body assembly firmly onto contact. The cable may have to be held in a clamping fixture. Arrange braid uniformly around crimp stem. Slide crimp sleeve forward and crimp using recommended crimp tool. Slide heat shrink forward and shrink (as applicable).



SPECIFICATIONS

ELECTRICAL RATI			
Frequency Range:	Flexible cable connectors)-12.4 GHz	<u>z</u>
	Uncabled receptacles)-18.0 GHz	<u>z</u>
VSWR: (f = GHz)	Straight Cabled Connectors	RA Cal	oled Connectors
RG-316	1.15 + .02f	1.	.15 + .03f
RG-58	1.15 + .01f	1.	.15 + .02f
	es		N/A
Working Voltage: (Vrms maximum)		
Connectors for Cal		Sea Leve	el 70K Feet
RG-316		250	65
RG-58, uncabled	receptacles	335	85
	ding Voltage: (VRMS minimum at sea level)		
Connectors for RO	G-316		750
	G-58, uncabled receptacles		
Corona Level: (Volt	s minimum at 70,000 feet)=		
Connectors for RO	G-316		190
Connectors for RO	G-58, uncabled receptacles		250
Insertion Loss: (dB	maximum)		
Straight flexible cal	ole connectors 0.06	√f (GHz),	tested at 6 GHz
Right angle flexible	cable connectors 0.15	√f (GHz),	tested at 6 GHz
	les		
	nce: 5000 megohms minimum		
	e: (milliohms maximum)		After
	,	Initial	Environmental
Center contact (strain	ght cabled connectors, uncabled receptacles	3.0	4.0
	t angle cabled connectors)		6.0
	nnectors)		N/A
			N/A
•			

	RF Leakage: (dB minimum, tested at 2.5 GHz)
	Flexible cable connectors60 dB
	Uncabled receptaclesN/A
	RF High Potential Withstanding Voltage: (Vrms minimum, tested at 4 and 7 MHz)
	Connectors for RG-316500
	Connectors for RG-58, uncabled receptacles670
	MEGUANIGAL BATINGS
	MECHANICAL RATINGS
	Engagement Design: MIL-STD-348, Series SMA
	Engagement/Disengagement Force: 2 inch-pounds maximum
	Mating Torque: 7 to 10 inch-pounds
	Coupling Proof Torque: 15 inch-pounds minimum
1	Coupling Nut Retention: 60 pounds minimum
1	Contact Retention: 6 lbs. minimum axial force (captivated contacts)
	4 inch-ounce minimum torque (uncabled receptacles)
	Cable Retention: <u>Axial Force*(lbs)</u> Torque (in-oz)
	Connectors for RG-316
	Connectors for RG-58
	*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
	Thermal Shock: MIL-STD-202, Method 107, Condition B
	Corrosion: MIL-STD-202, Method 101, Condition B
	Shock: MIL-STD-202, Method 213, Condition I
	Vibration: MIL-STD-202, Method 204, Condition D
	Moisture Resistance: MIL-STD-202, Method 106