75 Ω SCREW-ON & SNAP-ON SPECIFICATIONS

COAXICOM 75 Ω connectors are designed to provide a well-matched system impedance for critical telecommunication and CATV applications. They are available in both a Snap-On configuration with an interface similar to but larger than the SMB (the Snap-On series is also known as SMZ in the industry) and a Screw-On configuration, with an interface similar to but larger than the SMC. Both configurations are rated to 2 GHz, but have been successfully used to above 4 GHz.

COAXICOM also offers positive locking Snap-On plugs. See page 52 for details.

COAXICOM 75 Ω connectors are most often used with the 75 Ω cables in groups 24A, 25B and 28A shown in the table. Of particular note is the availability of both configurations for use on 75 Ω Ultra-Flex (cable group 31). The connectors are also available for many 50 Ω cables.

Within-series adapters are available in both configurations. Users may specify the finish for connectors and adapters as either nickel plated (suffix –7) or gold plated (suffix –1).

CABLE GROUPS

24	24A	RG174, 179, 187, 188, 316, LMR100, 100A
	24B	Not applicable for this series
25	25A	Not applicable for this series
	25B	RG180, 195, Essex 21-597
28	28A	RG59, 62, 210, M17/29, M17/30
30		RG402, M17/130, 50 Ω & 75 Ω .141 Semi Rigid, ULTRA-FLEX
31		RG405, M17/133, 50 Ω & 75 Ω .085 Semi Rigid & ULTRA-FLEX
50		735A (COMMSCOPE, AT&T), BELDEN735A1

ELECTRICAL

Impedance	75 Ω nominal		
Frequency Range	0 to 2 GHz		
Voltage Rating (max)	250 VRMS at sea level		
Voltage Drop (max)	4 millivolts max. at 1 amp., including mating connector.		
Insulation Resistance	1,000 Megohms (min.)		
Contact Resistance: milliohms max.	Initial	Straight	Rt. Angle
	Center	6.0	12.0
	Outer Contact	1.0	1.0
	Braid to Body	1.0	1.0
Dielectric Withstanding Voltage (Sea level)	2000 VRMS (RG180 cable)		
Corona Level (70,000 ft)	350 volts (RG180 cable)		
RF High Potential Voltage	Frequency 5 Mhz, RG180 cable, 1000 VRMS		
RF Leakage min. at 2 to 3 GHz	SNAP-ON: -55 dB; SCREW-ON: -60 dB		
Insertion Loss (dB) max. at 1.5 GHz	STRAIGHT: 0.30; RIGHT ANGLE: 0.60		

MATING CHARACTERISTICS

Interface Design	Interchangeable with leading manufacturers	
Engagement Force:	Snap-On	Screw-On
Longitudinal Force	14 lbs. max.	Not applicable
Torque	Not applicable	90 inch oz.
Cable Pullout Resistance	18 lbs. min., clamp & crimp types	
Coupling Nut Pullout Resistance	Female screw-on types, 35 lbs. min. to 100 lbs.	

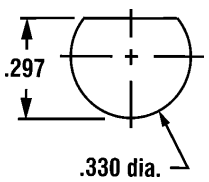
MATERIALS

Body Components, Male Contact & Nuts	Brass per ASTM B16, ALLOY 360, half hard
Spring Contacts	Beryllium Copper per ASTM B196, condition HT
Insulators	TFE per ASTM-D-1710
Lockwashers	Phosphor Bronze per ASTM B139

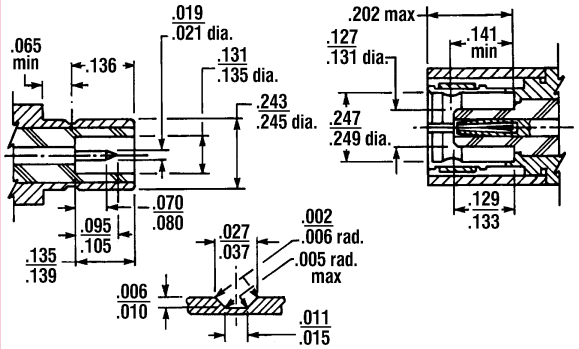
FINISH

Center Contacts	Gold plated per MIL-PRF-39012, IAW MIL-G-45204
Other Metal Parts	Gold plated per MIL-G-45204, Type II, Class 1, Grade C over copper per MIL-C-14550, Class 4, or nickel per QQ-N-290.

RECOMMENDED MOUNTING HOLE (±.003)



75 Ω SNAP-ON INTERFACE DIMENSIONS



75 Ω SCREW-ON INTERFACE DIMENSIONS