SMA-COM

CHARACTERISTICS

TEST / CHARACTERISTICS	MIL-C-39012 PARAGRAPH	VALUES / REMARKS			
GENERAL					
Impedance	-	50Ω			
Frequency Range	-	Semi-Rigid Cables		Standard Models	
	-	DC - 18 GHz		DC - 12.4 GHz	
Temperature Range	-	-65 °C + 105 °C		-65 °C + 165 °C	
ELECTRICAL CHARACTERISTICS					
Insulation Resistance	3-11	5000 MΩ min.			
Contact Resistance **• Outer Conductor** **• Inner Conductor**	3-16 - -	Initial 3 mΩ 2 mΩ		After Test 4 mΩ 3 mΩ	
V.S.W.R. max up to: **18 GHz for Semi-Rigid Cable** **12.4 GHz for Right Angle Connector (SR)** **12.4 GHz for Flexible Cable**	3-14	.085"	.141"	2.6/50/S	5/50/D
• Straight Connector **• Right Angle Connector**		1.07 + .01F 1.10 + .01F	1.05 + .01F 1.10 + .01F	1.15 + .02F 1.15 + .03F	1.15 + .01F 1.15 + .02F
Dielectric Withstanding Voltage in VRMS	3-17	750	1000	750	1000
Working Voltage in VRMS (Sea Level)	-	335	500	250	335
Working Voltage in VRMS (70000 ft)	-	85	125	65	85
RF Testing Voltage at 5 MHz in VRMS	3-23	500	670	500	670
MECHANICAL CHARACTERISTICS					
Cable Retention Force	3-24	.085"	.141"	2.6/50/S	5/50/D
		130 N	270 N	90 N	204 N
Life	3-15	100 Matings			
Force to Engage and Disengage	3-5-1	23 Ncm - 2 inch pounds			
Coupling Nut Torque Recommended	-	60 Ncm - 5.2 inch pounds			
Coupling Nut Retention Force	3-25	272 N min			
ENVIRONMENTAL CHARACTERISTICS					
Vibration	3-18	MIL STD 202, Method 204, Condition D, 20g			
Shock	3-19	MIL STD 202, Method 213, Condition I, 100g			
Thermal Shock	3-20	MIL STD 202, Method 107, Condition B			
Corrosion (Salt Spray)	3-13	MIL STD 202, Method 101, Condition B			
Moisture Resistance	3-21	MIL STD 202, Method 106			
Barometric Pressure	3-22	MIL STD 202, Method 105, Condition C			
Hermetic Test	-	Down to 10^{-6} mmHg (Torr) Leakage Rate < 10^{-8} atm/cm^3/sec			
Life (At High Temperature)	-	MIL STD 202, Method 108			

MATERIALS AND PLATING

	Material	Plating
Bodies	Brass	BBR [1] or Gold Plated
Center Contacts	Beryllium Copper (Female) Brass (Male)	Gold Plated
Insulators	PTFE Teflon	-
Gasket	Silicone Rubber	-

Notes

1. Bright Bronze Radiall

Standard packaging: 100 pieces

All dimensions are given in mm.