SMA

CHARACTERISTICS

TEST / CHARACTERISTICS	VALUES / REMARKS

ELECTRICAL CHARACTERISTICS

Impedance		50Ω					
Frequency Range		DC - 18 GHz					Extended
V.S.W.R. (typ.)	**Frequency**	1 GHz	2.4 GHz	6 GHz	12.4 GHz	18 GHz	27 GHz
• Straight Connector	**.085"**	1.01	1.01	1.04	1.06	1.06	1.12
	.141"	1.01	1.01	1.01	1.03	1.05	1.10
	2.6/50S	1.05	1.07	1.12	1.15	-	-
	5/50S	1.04	1.05	1.10	1.12	-	-
• Right Angle Connector	**.085"**	1.01	1.02	1.06	1.14	-	-
	.141"	1.01	1.02	1.08	1.10	-	-
	2.6/50S	1.06	1.15	1.18	1.24	-	-
	5/50S	1.06	1.15	1.15	1.25	-	-
Insertion Loss (typ.) dB							
• Straight Connector	**.085"**	0.03	0.03	0.05	0.08	0.10	0.15
	.141"	0.02	0.02	0.02	0.02	0.02	0.10
	2.6/50S	0.06√F (F in GHz) max					-
	5/50S						
• Right Angle Connector	**.085"**	0.04	0.04	0.04	0.08	-	-
	.141"	0.04	0.05	0.06	0.09	-	-
	2.6/50S	0.08	0.08	0.10	0.10	-	-
	5/50S	0.04	0.12	0.12	0.25	-	-
RF Leakage (dB max) **• Connectors for Semi-Rigid Cables Solder Attachment** **• Connectors for Flexible Cables Crimp Attachment** **• Receptacles**		- 90 + F (GHz) - 60 + F (GHz) - 100 + F (GHz)					
Insulation Resistance		5000 MΩ min					
Contact Resistance **• Outer Conductor** **• Inner Conductor**		After Tests 4 mΩ 3 mΩ			Initial 3 mΩ 2 mΩ		
Working Voltage in VRMS **• Sea Level** **• 70000 ft (21000 m)**		.085", RG 405, KS 1		.141", RG 402, KS 2	RG 174, 188, 316, KX 3, KX 22		RG 55, 142, 223, KX 23
		350		500	250		335
		85		125	65		85
Dielectric Withstanding Voltage in VRMS		1000		1500	750		1000
RF Testing Voltage at in VRMS		670		1000	500		670

MECHANICAL CHARACTERISTICS

Durability	500 Matings				
Force to Engage and Disengage	23 Ncm - (2 inch pounds)				
Recommended Coupling Nut Torque	80 to 115 Ncm - (7 to 10 inch pounds)				
Coupling Nut Retention Force	270 N - (60 Lbs)				
Cable Retention Force	.085", RG 405, KS 1		.141", RG 402, KS 2	RG 174, 188, 316, KX 3, KX 22	RG 55, 142, 223, KX 23
	135 N (30 Lbs)		270 N (60 Lbs)	110 N (25 Lbs)	180 N (40 Lbs)
Center Contact Retention Force **• Axial** **• Torque**	27 N 2.8 N				