TNC 18 GHz

CHARACTERISTICS

TEST / CHARACTERISTICS	MIL-C-39012 A	VALUES / REMARKS	
ELECTRICAL CHARACTERISTICS			
Impedance	-	50Ω	
Frequency Range	-	DC - 18 GHz	
V.S.W.R.	3-14	Semi–Rigid Cable: 1.17 max	
		Flexible Cable: 1.35 at 12.4 GHz	In Series Adapter: 1.35 max
Insertion loss	3-27	0.18 dB max at 9 GHz	
RF Leakage	3-26	-60 dB min from 2 to 3 GHz	
Insulation Resistance	3-11	5000 MΩ min	
Contact Resistance **• Center Contact (mΩ)** **• Outer Contact (mΩ)**	3-16 - -	Initial 1.5 0.2	After Proof 2 -
Working Voltage	-	At sea level: 500 V rms	at 70000 ft (21000 m): 125 V rms
Dielectric Withstanding Voltage	3-17	At sea level: 1500 V rms	at 70000 ft (21000 m): 375 V rms
RF Withstanding Voltage	3-23	At sea level: 1000 V rms (5 MHz sine wave)	
MECHANICAL CHARACTERISTICS			
Durability	3-15	500 Matings	
Mating / Unmating	-	Axial Force: Not Applicable Torque: 1.96 inch pounds (22.6 N.cm)	
Recommended Mating Torque	-	22.98 inch pounds (265 N.cm)	
Proof Torque	-	29.40 inch pounds (339 N.cm)	
Coupling Mechanism Retention Force	3-25	100 Lbf (44.5 daN)	
Cabling Retention Force	3-24	51 Lbf (227 N min) (cable dia. .189 (4.8) to .228 (5.8))	
		76.4 Lbf (340 N min) (cable dia. .250 (6.35) and above)	
Center Contact Retention	-	Axial: 6.06 Lbf (27 N)	
ENVIRONMENTAL CHARACTERISTICS			
Temperature Range **• Standard Models** **• Hermetic Sealed Models** **• Models for Semi-Rigid Cables**	- - -	-65 °C / + 165 °C -65 °C / +100 °C -65 °C / +105 °C	
Combined Climate Tests			
Thermal Shock	3-20	MIL-STD-202, Method 107, Condition B	
High Temperature Endurance	-	MIL-STD-202, Method 108	
Corrosion (Salt Spray)	3-13	MIL-STD-202, Method 101, Condition B	
Vibrations	3-18	MIL-STD-202, Method 204, Condition B	
Shocks	3-19	MIL-STD-202, Method 213, Condition G	
Moisture Resistance	3-21	MIL-STD-202, Method 106	
Low Pressure	3-22	Not Applicable	
Hermetic Seal	-	Applied Vacuum 10^{-6} mm of Hg (Torrs) Leakage Rate < 10^{-6} atm/cm^3/s	
Leakage	-	Pressure 3.5 bars; Duration 2 mn; Temperature 15 °C to 25 °C	
MATERIALS			
Body	-	Stainless Steel	
Center Socket Contact **• Male** **• Female**	-	 Brass Bronze	
Ferrules	-	Brass	
Insulators	-	PTFE Teflon	
Gaskets	-	Silicone Elastomer	
PLATING			
Body	-	Passivated	
Center Contacts	-	Gold Plated	