



BNC 50Ω

CHARACTERISTICS

TEST / CHARACTERISTICS	STANDARD REFERENCE	VALUES / REMARKS		
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ELECTRICAL CHARACTERISTICS

Impedance	-	50Ω		
Frequency Range	-	DC - 4 GHz		
Typical V.S.W.R.	-	1 GHz	2.5 GHz	4 GHz
• Straight Models Cable Group: 2/50, 2.6/50, 5/50, 10 + 11/50, .141"	-	1.12	1.18	1.22
• Right Angle Models: 2/50, 2.6/50, 5/50	-	1.13	1.30 max 1.20	1.22
Insertion Loss	MIL	0.05	0.07	0.13
• Straight Connector		0.08	0.16	0.20
• Right-Angle Connector				
RF Leakage		-55 dB min from 2 to 3 GHz		
Insulation Resistance		5000 MΩ min		
Contact Resistance				
• Center Contact		1.5 mΩ		
• Outer Contact		0.2 mΩ		
Working Voltage in VRMS				
• At Sea Level (at 21000m)		500		
		125		
Dielectric Withstanding Voltage in VRMS				
• At Sea Level (at 21000m)		1500		
		375		
RF Testing Voltage in VRMS Sea Level (5 MHz)	-	1000		

MECHANICAL CHARACTERISTICS

Durability	MIL	500 Matings		
Force to Engage and Disengage				
• Axial		13.6 N max		
• Torque		28.6 Ncm		
Coupling Nut Retention Force		445 N		
Cable Retention Force				
• Cable 2/50, 2.6/50		227 N		
• Cable 5/50, 10 + 11/50				
• Cable .141"				
Center Contact Retention Force		27.2 N		

ENVIRONMENTAL CHARACTERISTICS

Temperature Range	MIL			
• Flexible Cables		-65 °C + 165 °C		
• Semi-Rigid Cables		-65 °C + 105 °C		
Thermo Cycling Test		MIL STD 202, Method 107, Condition B		
Thermal Shock		MIL STD 202, Method 107, Condition B		
High Temperature Endurance		MIL STD 202, Method 108		
Corrosion Salt Spray		MIL STD 202, Method 101, Condition B		
Vibration		MIL STD 202, Method 204, Condition B		
Shock		MIL STD 202, Method 213, Condition G		
Moisture Resistance		MIL STD 202, Method 106		
Hermetic Test		MIL STD 202, Method 112, Condition C		
Barometric Pressure		Vacuum 10 ⁻⁶ Hgmm (Torr) Leakage Rate < 10 ⁻⁶ atm/cm ³ /s		
		Pressure Test: 3.5 bars; Duration: 2 mn; Temperature: 15 °C to 25 °C		

MATERIALS AND PLATING

	Material	Plating
Bodies	Brass	Nickel / BBR
Center Contact	Brass	Gold
• Male	Bronze or Heat Treated Beryllium Following QQ-C-530	
• Female		
Nut	Brass	-
Insulator	PTFE	-
Gasket	Silicone Rubber	-

Notes

All dimensions are given in mm.