BMA

CHARACTERISTICS

TEST / CHARACTERISTICS	VALUES / REMARKS

ELECTRICAL CHARACTERISTICS

Impedance	50Ω	
Frequency Range	DC - 22 GHz	
V.S.W.R.	.085"/ RG405 Semi-Rigid Cable: 1.05 + 0.01 F (GHz)	
Insertion Loss (typ.) dB	0.03 √ F (GHz)	
RF Leakage (min.) dB	-90 + F (GHz) for Gold and BBR Connector Body -80 + F (GHz) for Passivated Connector Body	
Insulation Resistance	≥ 5000 MΩ	
Contact Resistance	Center Contact: 5 mΩ max. / Outer Contact: 2.5 mΩ max.	
Voltage in V. RMS **• At Sea Level** **• At 70000 ft**	Dielectric Withstanding Voltage ≥ 1000 V. 200 V.	Working Voltage ≤ 335 V. 85 V.

MECHANICAL CHARACTERISTICS

Durability	>1000 Cycles	
Force to Engage	13.6 N (3 lbf) max.	
Force to Disengage	0.56 N (0.13 lbf) min.	
Cable Retention Force	.085"/ RG405 Cable	.141"/ RG402 Cable
	> 136 N (30 lbf)	> 272 N (61 lbf)
Center Contact Retention Force	27 N (6 lbf) min.	
Misalignment **• Radial Misalignment** **• Axial Misalignment**	Fixed Mount ± 0.1mm (.004 in) 0.38mm (.015 in) max.	Float Mount ± 0.51mm (.020 in) 1.52mm (.060 in) min.

ENVIRONMENTAL CHARACTERISTICS

Temperature Range **• Standard Models** **• Semi-Rigid Cables**	-65 °C / + 165 °C -65 °C / +105 °C
Thermal Cycling	MIL-STD-202, Method 107, Condition B, -65 °C / +125 °C
Vibration	MIL-STD-202, Method 204, Condition D, 20 g
Shock	MIL-STD-202, Method 213, Condition A, 50 g
Bumps	CECC 22000, Paragraph 4.6.2, 4000 Bumps per Axis
Moisture Resistance	MIL-STD-202, Method 106
Corrosion	MIL-STD-202, Method 101, Condition A, 96H
Degree of Protection	IP54 (Male Connector with O-Ring)

MATERIALS AND PLATING

	Material	Plating
Body/Nut	Stainless Steel (Standard BMA) Brass (Commercial BMA)	Gold or Passivated BBR
Center Contacts	Brass (Male) Beryllium Copper (Female)	Gold over Nickel or NPGR
Outer Contact	Beryllium Copper	NPGR
Gaskets	Silicon Rubber	-
Insulators	PTFE	-