SSMA



50Ω	DC - 18 GHz
DC-34 GHz possible	

INTRODUCTION

GENERAL

- Miniature coaxial connectors
- Screw-on coupling
- High RF performance
- Reduced weight and size

APPLICATIONS

- Military aeronautics
- Missiles
- Detection - countermeasures

APPLICABLE STANDARDS

- CECC 22 160
- MIL-STD-348 fig.319

SPACE QUALIFIED APPROVAL

- SCC 3402 (ESA)

Introduced in the 1960s, the SSMA series of connectors are of identical construction to the classic SSMA series but offer the benefit of reduced dimensions. They are recommended for use on equipment having limited component space availability combined with frequency requirements up to 34 GHz. Today, SSMA is mostly used for maintenance of existing equipment. For new projects, we advise using SMP or SMP-LOCK™ connectors.

CHARACTERISTICS

TEST / CHARACTERISTICS	VALUES / REMARKS	
ELECTRICAL CHARACTERISTICS		
Impedance	50Ω	
Frequency Range	DC - 18 GHz	
VSWR	.085" / RG405 Semi-Rigid Cable: 1.07 + 0.01 F (GHz)	
Insertion Loss (typ.) dB	0.04 √F (GHz)	
RF Leakage (min) dB	-90 + F (GHz)	
Insulation Resistance	> 1000 MΩ	
Contact Resistance	Center Contact: 5mΩ max. / Outer Contact: 2.5mΩ max.	
Voltage in VRMS **• At Sea Level** **• At 70,000 ft**	Dielectric Withstanding Voltage > 750 V. 150 V.	Working Voltage < 250 V. 65 V.
MECHANICAL CHARACTERISTICS		
Durability	> 500 Cycles	
Force to Engage / Disengage	Torque 12 N.com (2 inch-pounds)	
Recommended Coupling not Torque	60 to 80 N.com (5.3 to 7.1 inch-pounds)	
Cable Retention Force	.085: / RG405 Cable > 136 N (30lbf)	
Center Contact Retention Force	22N (5lbf) min.	
ENVIRONMENTAL CHARACTERISTICS		
Temperature Range **• Standard Models** **• Semi-Rigid Cables**	 - 55 °C / +155 °C - 55 °C / +105 °C	
Thermal Cycling	MIL-STD-202, Method 102, Condition D	
Vibration	MIL-STD-202, Method 204, Condition A, 10g	
Shock	MIL-STD-202, Method 213, Condition A, 50g	
Moisture Resistance	MIL-STD-202, Method 106	
Corrosion	MIL-STD-202, Method 101, Condition B	

MATERIALS AND PLATING

	Material	Plating
Body/Nut	Stainless Steel / Brass	Gold or Passivated / BBR
Center Contacts	Brass (Male) / Beryllium Copper (Female)	Gold over Nickel
Gaskets	Silicone Rubber	-
Insulators	PTFE	-