

SSMA DESIGN FEATURES & SPECIFICATIONS

SSMA DESIGN FEATURES: SGMC Microwaves SSMA series are precision grade connectors designed for use with microwave applications requiring excellent performance up to 34 GHz and beyond to 40 GHz. The SSMA series is mechanically compatible with our very own ASSMA connector series. SGMC offers an extensive line of SSMA precision adapters, receptacles, and cable connectors for various semi-rigid and flexible coaxial cables. Special designs are also available upon request.

- Frequency Range: DC to 34 GHz and beyond to 40 GHz
- Mechanically compatible with our ASSMA connector series
- Ruggedized construction for repeatability and reliability
- Reduced size for superior packaging capabilities
- Low VSWR and insertion loss



SSMA SPECIFICATIONS (General)

| ELECTRICAL | | MECHANICAL | |
|---|--|-----------------------------------|--|
| Frequency Range: | DC to 34 GHz and beyond to 40 GHz | Mating: | (10-36 UNS) .190-36 UNS threaded coupling |
| Nominal Impedance: | 50 Ohms | Recommended Mating Torque: | 6-8 inch-pounds |
| Temperature Range: | -65°C to +165°C | Coupling Proof Torque: | 15 inch-pounds minimum |
| VSWR: (Individual results may vary) | 1.35:1 Max | Coupling Nut Retention: | Axial force is 60 in-lb minimum (Male Only) |
| Insertion Loss: | 0.35 dB Max | Connector Durability: | 500 cycles minimum |
| Insulation Resistance: | 5,000 megaohms minimum | | |
| Dielectric Withstanding Voltage: | 750 Volts RMS | | |
| ENVIRONMENTAL | | MATERIAL | |
| Corrosion (salt spray): | MIL-STD-202, Method 101, Test Condition B (5% Salt Solution) | Body Components: | Corrosion resistant Type 303 (Stainless Steel) Non-Magnetic, per ASTM-A-484 and ASTM-A-582 |
| Vibration: | MIL-STD-202, Method 204, Test Condition D (20 Gs) | Center Contacts: | Beryllium Copper per ASTM-B-196, alloy C17300, ASTM Temper (condition) TD04 |
| Shock: | MIL-STD-202, Method 213, Test Condition I (100 Gs) | Dielectric: | Fluorocarbon (PTFE) per ASTM-D-1710, Type 1, Grade 1, Class A |
| Temperature Cycling: | MIL-STD-202, Method 102, Test Condition C | Gaskets & "O" Rings: | Silicone Rubber per ZZ-R-765 & MIL-R-5847 Class 2 A&B, Grades 50~70. (A-A-59588) |
| Moisture Resistance: | MIL-STD-202, Method 106 | | |
| (Consult factory for individual product specifications) | | FINISH | |
| | | Body Components: | Passivated per ASTM-A-967 & AMS-QQ-P-35 |
| | | Center Contacts: | Gold Plate to a minimum thickness of 50 micro inches per ASTM-B-488, Type 2, Code C, Class 1, over 50 micro inches minimum of Nickel per AMS-QQ-N-290, Class 1 |

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| DWG NO. | SSMA Series | SGMC MICROWAVE www.sgmcmicrowave.com | REVISIONS | | |
| | | | LTR: | DESCRIPTION: (ECN#) | DATE: |
| | | | -- | DWG. RELEASED | 02/04/02 |
| TITLE: | SSMA DESIGN FEATURES & SPECIFICATIONS | Manufacturer of Precision Coaxial Connectors | | | |
| | | "PROPRIETARY INFORMATION" THE INFORMATION WITHIN THIS DRAWING IS PROPRIETARY AND SHALL NOT BE USED OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM (SGMC) SGMC MICROWAVE. | | | |
| | | SCALE: NTS | CAGE CODE: 1UYM4 | | |
| | | DRAWN: LRH II | APPR: <i>Letta</i> | | |
| | | SHEET: 1 OF 1 | SIZE: A | | |