

# SMA (M) to SMA (M) Coaxial Cable, Flexible, Lab Grade, 40"

### **Description:**

Model SCW-SMSM040-F1-A is a 40" long, flexible, lab grade coaxial cable with SMA male connectors that cover the frequency range of DC to 26.5 GHz. The coaxial cable utilizes high performance material and a precision manufacturing process to guarantee superior microwave performance and mechanical durability. The impedance of the cable is 50 ohms. Other lengths are offered under different models.



#### **Features:**

- High Return Loss
- Low Insertion Loss
- Flexible and Durable

# **Applications:**

- Test Lab
- Sub-assemblies

## **Electrical Specifications:**

| Parameter                 | Minimum   | Typical  | Maximum    |
|---------------------------|-----------|----------|------------|
| Frequency                 | DC        |          | 26.5 GHz   |
| Insertion Loss @ 3 GHz    |           | < 0.7 dB |            |
| Insertion Loss @ 6 GHz    |           | < 1.0 dB |            |
| Insertion Loss @ 12 GHz   |           | < 1.4 dB |            |
| Insertion Loss @ 18 GHz   |           | < 1.6 dB |            |
| Insertion Loss @ 26.5 GHz | //\       | < 2.1 dB |            |
| Return Loss @ 26.5 GHz    | teen // N | 20 dB    |            |
| Impedance                 | (James)   | 50 Ω     |            |
| Breakdown Voltage         |           |          | 1000 Volts |
| Radiation Shielding       |           | 90 dB    |            |
| Power Handling @ 26.5 GHz | /IIIIII   | adam I   | 105 W (CW) |
| Specification Temperature |           | +25 °C   | TG.        |
| Operating Temperature     | -40 °C    | 7        | +85 °C     |

## **Mechanical Specifications:**

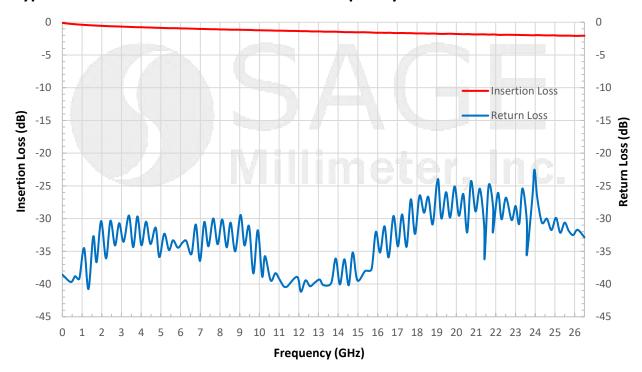
| Item  | Specification                      |
|---|------------------------------------|
| Connectors                                  | SMA Male                           |
| Connector Contact Material/Plating          | Brass/Gold Plating Per MIL-G-45204 |
| Connector / Cable Insulation Layer Material | Passivated Stainless Steel / PTFE  |
| Cable Jacket Material                       | FEP                                |
| Cable Outer Diameter                        | 0.181"                             |
| Length                                      | 40"                                |
| Minimum Bending Radius                      | 0.79"                              |
| Weight                                      | 1.0 Oz                             |
| Outline                                     | CW-SS-F8-A                         |



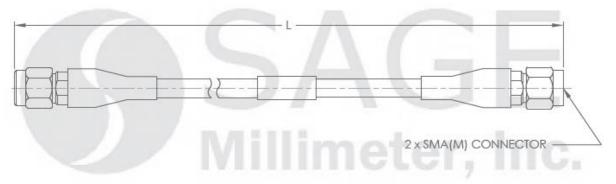
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

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### Typical Insertion Loss & Return Loss vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



### Note:

- Length "L" can be customizable.
- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

- Bending the cable sharply will either cause damage or degrade the performance of the cable.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter** torque wrench, model SCH-08008-S1, is highly recommended.



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