

# SMA (M) to SMA (M) Coaxial Cable, Flexible, Lab Grade, 48"

## **Description:**

Model SCW-SMSM048-F1-A is a 48" 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		< 0.8 dB	
Insertion Loss @ 6 GHz		< 1.2 dB	
Insertion Loss @ 12 GHz		< 1.6 dB	
Insertion Loss @ 18 GHz		< 1.9 dB	
Insertion Loss @ 26.5 GHz		< 2.4 dB	
Return Loss @ 26.5 GHz	V / V	20 dB	10
Impedance		50 Ω	
Breakdown Voltage	L 11 11 1		1000 Volts
Radiation Shielding		90 dB	
Power Handling @ 26.5 GHz	0.011111		105 W (CW)
Specification Temperature		+25 °C	nc.
Operating Temperature	-40 °C		+85 °C

## **Mechanical Specifications:**

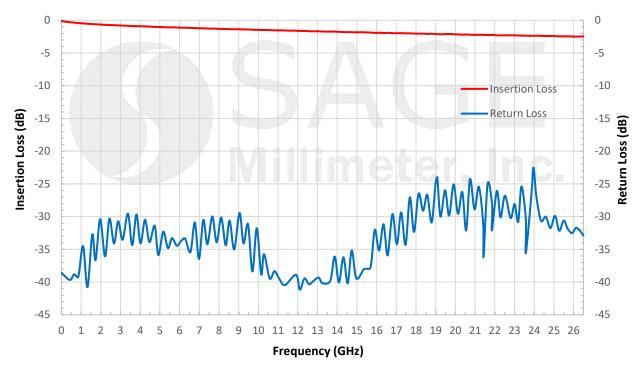
Item	Specification	
Connectors	SMA Male	
Connector Contact Material/Plating	Brass/Gold Plating Per MIL-G-45204	
Connector / Cable Insulation Layer Material	Passivated Stainless Steel / PTFE	
Cable Jacket Material	FEP	
Cable Outer Diameter	0.181"	
Length	48"	
Minimum Bending Radius	0.79"	
Weight	1.0 Oz	
Outline	CW-SS-F8-A	



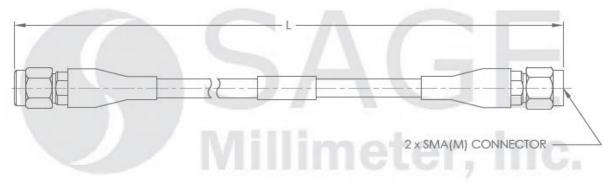
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## **Typical Insertion Loss & Return Loss vs. Frequency**



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,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter** torque wrench, model SCH-08008-S1, is highly recommended.



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