# SCW-SMSM012-S1-PM

## SMA (M) to SMA (M) Coaxial Cable, Semi-Rigid, 12", Phase Matched

### **Description:**

Model SCW-SMSM012-S1-PM is a 12" long, semi-rigid, phase matched 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
- Semi-Rigid

### **Electrical Specifications:**

- **Applications:** 
  - Sub-assemblies

Test Lab

System Integration

Customizable Length

Parameter	Minimum	Typical	Maximum
Frequency	DC		26.5 GHz
Insertion Loss @ 3 GHz		0.5 dB	
Insertion Loss @ 6 GHz		0.7 dB	
Insertion Loss @ 12 GHz		1.0 dB	
Insertion Loss @ 18 GHz		1.2 dB	
Insertion Loss @ 26.5 GHz		1.6 dB	
Return Loss @ 26.5 GHz		17 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		±10 °	
Breakdown Voltage			500 V
Radiation Shielding		120 dB	
Velocity Factor		70%	
Power Handling @ 26.5 GHz	MIII internet	ALAN	30 W (CW)
Specification Temperature	VIIIIII	+25 °C	HG.
Operating Temperature	-40 °C	1	+85 °C

### **Mechanical Specifications:**

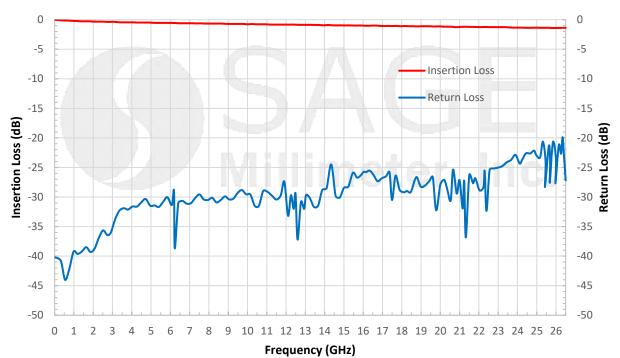
Item	Specification	
Minimum Bending Radius	0.126″	
Connectors	SMA Male	
Connector Material	Passivated Stainless Steel	
Cable Conductor	Brass, Gold Plated	
Cable Insulators	PTFE	
Cable Outer Diameter	0.087″	
Length	12"	
Outline	CW-SS-S8	



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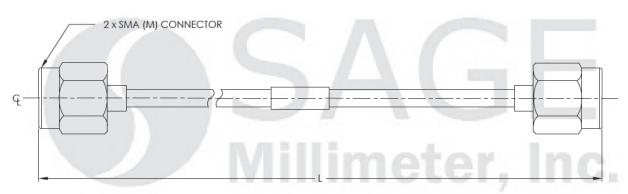
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### **Typical Insertion Loss & Return Loss vs. Frequency**

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-U3, is highly recommended.



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