

# SMA (M) to SMA (M) Coaxial Cable, Semi-Rigid, 40", Phase Matched

### **Description:**

Model SCW-SMSM040-S1-PM is a 40" 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

# **Applications:**

- Test Lab
- Sub-assemblies
- System Integration

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	DC		26.5 GHz
Insertion Loss @ 3 GHz		1.3 dB	
Insertion Loss @ 6 GHz		2.0 dB	
Insertion Loss @ 12 GHz		3.0 dB	
Insertion Loss @ 18 GHz		3.6 dB	
Insertion Loss @ 26.5 GHz		4.7 dB	
Return Loss @ 26.5 GHz		17 dB	4
Impedance		50 Ω	
Phase Match (Unit to Unit)		±10 °	1
Breakdown Voltage			500 V
Radiation Shielding		120 dB	40
Velocity Factor		70%	
Power Handling @ 26.5 GHz	A/IIII ma	ATAK I	30 W (CW)
Specification Temperature	ALLILLIA	+25 °C	HG.
Operating Temperature	-40 °C	F	+85 °C

## **Mechanical Specifications:**

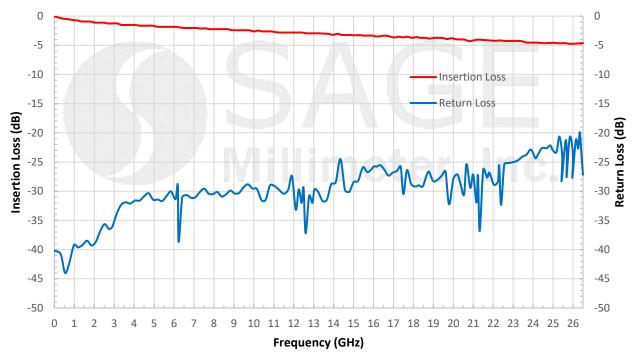
Item	Specification	
Minimum Bending Radius	0.126"	
Connectors	SMA Male	
Connector Material	Passivated Stainless Steel	
Cable Conductor	Brass, Gold Plated	
Cable Insulators	PTFE	
Cable Outer Diameter	0.087"	
Length	40"	
Outline	CW-SS-S8	



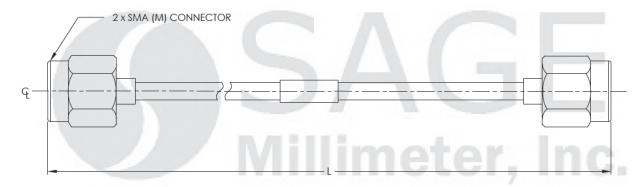
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

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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,  $8.0 \pm 0.15$  inch-pounds (0.90  $\pm$  0.02 Nm), should be applied. **SAGE Millimeter** torque wrench, model SCH-08008-U3, is highly recommended.



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