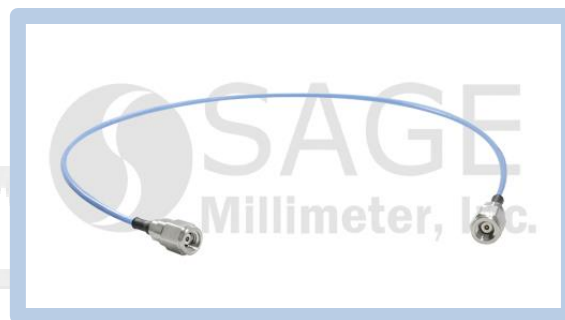




## 1 mm (M) to 1 mm (M) Coaxial Cable, Flexible, 12", Low Insertion Loss

### Description:

**Model SCW-1M1M012-F1-2** is a 12" long, flexible, coaxial cable with 1 mm male connectors that cover the frequency range of DC to 110 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		110 GHz
Insertion Loss @ 110 GHz		5.5 dB	
Return Loss @ DC to 40 GHz		18 dB	
Return Loss @ 40 to 60 GHz		17 dB	
Return Loss @ 60 to 110 GHz		16 dB	
Impedance		50 Ω	
Power Handling @ 100 GHz			2 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+100 °C

### Mechanical Specifications:

Item	Specification
Connectors	1 mm Male
Connector Material	Passivated Stainless Steel
Cable Inner Conductor	Copper, Silver Plated
Cable Outer Conductor I	Braided Copper, Silver Plated
Cable Outer Conductor II	Flat Wire Copper, Silver Plated
Cable Insulator Material	Fluorinated Ethylene Propylene (FEP), Clear
Cable Outer Sheath	Fluorinated Ethylene Propylene (FEP), Blue
Cable Outer Diameter	0.058"
Length	12"
Minimum Bending Radius	0.201"
Weight	0.2 Oz
Outline	CW-11-F7

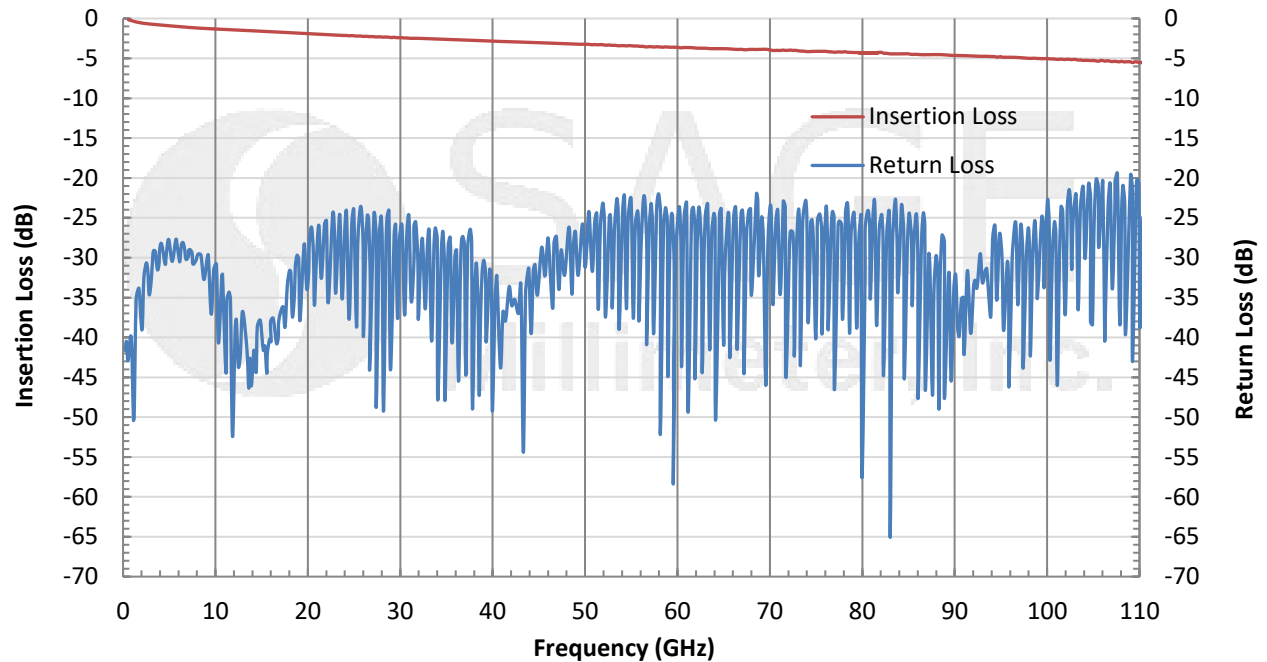


www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505  
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

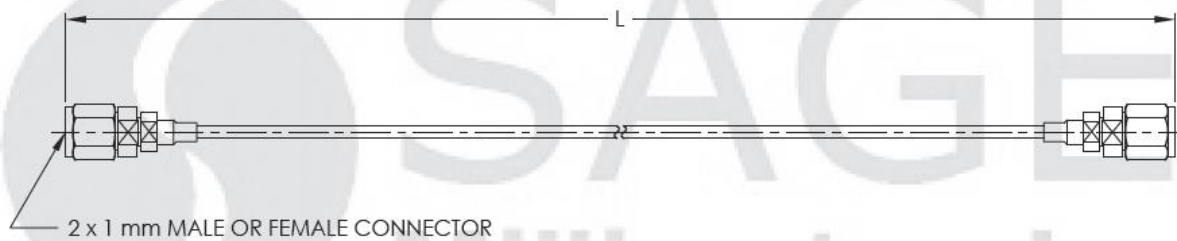


## 1 mm (M) to 1 mm (M) Coaxial Cable, Flexible, 12", Low Insertion Loss

### Typical Performance 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,  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**



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