

## 1 mm (M) to 1 mm (M) Coaxial Cable, Flexible, 40", Phase Matched

### Description:

**Model SCW-1M1M040-F1-PM** is a 40" long, flexible, phase matched 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:

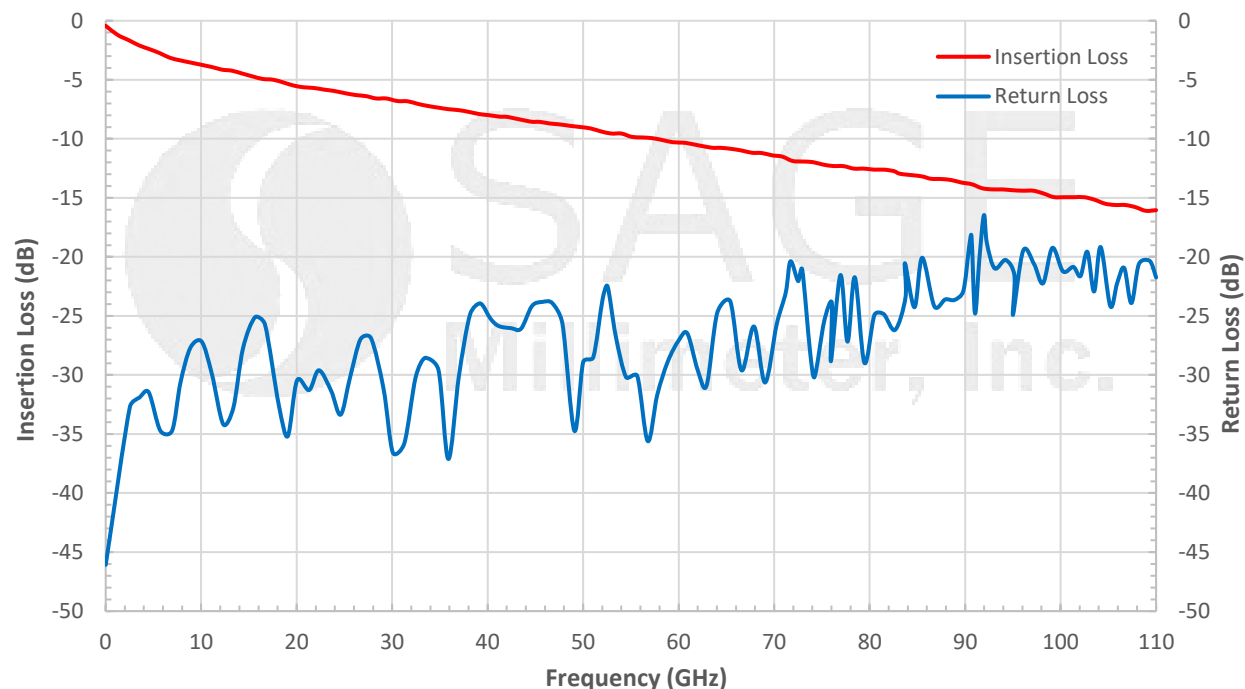
Parameter	Minimum	Typical	Maximum
Frequency	DC		110 GHz
Insertion Loss @ 110 GHz		19 dB	
Return Loss		14 dB	
Impedance		50 $\Omega$	
Phase Match (Unit to Unit)		$\pm 55^\circ$	
Power Handling			2 W (CW)
Specification Temperature		+25 $^\circ\text{C}$	
Operating Temperature	-40 $^\circ\text{C}$		+100 $^\circ\text{C}$

### Mechanical Specifications:

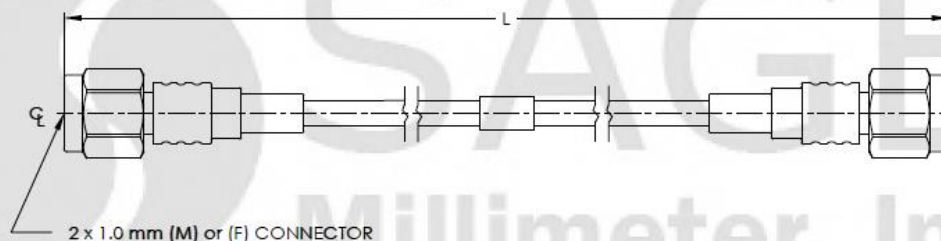
Item	Specification
Connectors	1 mm Male
Connector Material	Passivated Stainless Steel
Cable Inner Conductor	Beryllium Copper
Cable Insulator Material	PEI
Cable Outer Sheath	Fluorinated Ethylene Propylene (FEP)
Cable Outer Diameter	0.058"
Length	40"
Minimum Bending Radius	0.250"
Weight	1.1 Oz
Outline	CW-11-F10

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### Typical Performance vs. Frequency



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



#### 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 used. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**



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