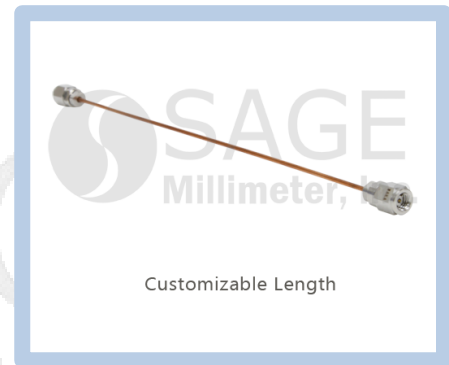




1 mm (M) to 1 mm (M) Coaxial Cable, Semi-Rigid, 6"

Description:

Model SCW-1M1M006-S1 is a 6" long, semi-rigid 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 and a capacitance of 95 pF/m. 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 | | 110 GHz |
| Insertion Loss @ 110 GHz | | 2.5 dB | |
| Return Loss @ DC to 40 GHz | | 18 dB | |
| Return Loss @ 40 to 60 GHz | | 16 dB | |
| Return Loss @ 60 to 110 GHz | | 13 dB | |
| Impedance | | 50 Ω | |
| Power Handling @ 100 GHz | | | 2 W (CW) |
| Capacitance | | 95 pF/m | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +100 °C |

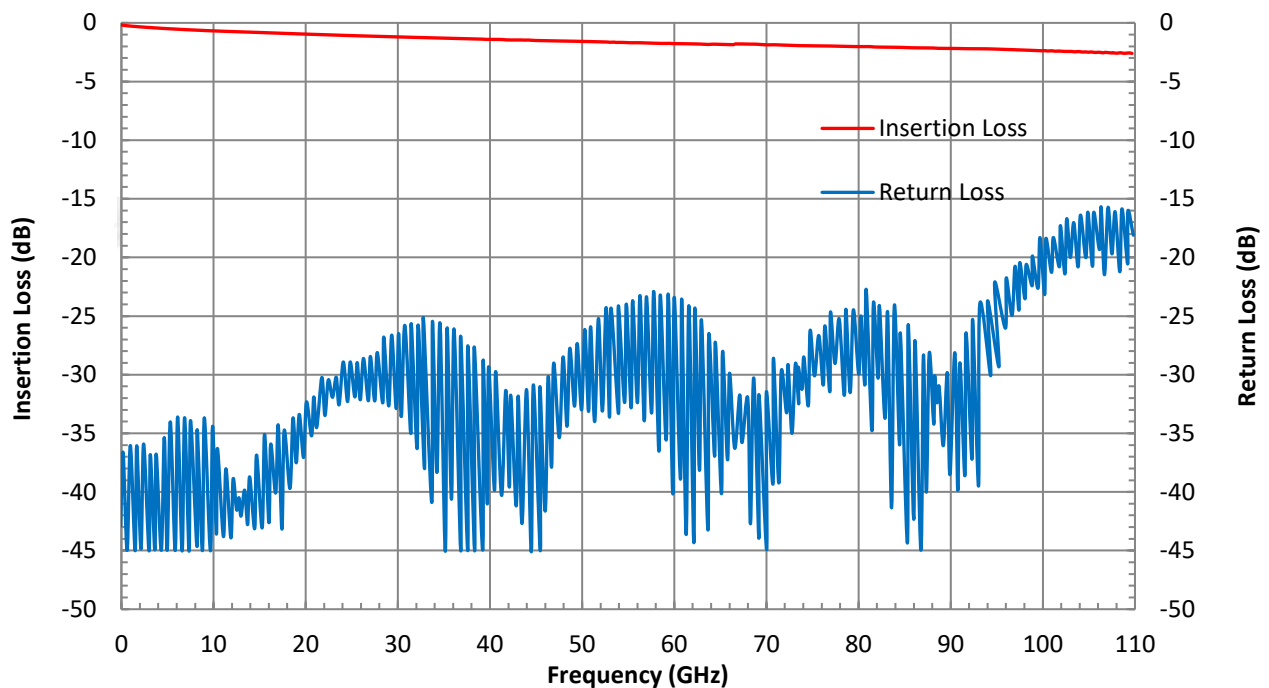
Mechanical Specifications:

| Item | Specification |
|--------------------------------|----------------------------|
| Minimum Bending Radius | 0.126" |
| Connectors | 1 mm Male |
| Connector Material | Passivated Stainless Steel |
| Cable Inner Conductor Material | Copper, Silver Plated |
| Cable Insulator Material | PTFE |
| Cable Outer Conductor Material | Oxygen-free Copper |
| Cable Outer Diameter | 0.047" |
| Length | 6" |
| Weight | 0.2 Oz |
| Outline | CW-11-S7 |



1 mm (M) to 1 mm (M) Coaxial Cable, Semi-Rigid, 6"

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 ± 0.15 inch-pounds (0.45 ± 0.02 Nm), should be used. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**

