

**2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Semi-Rigid, 9"**

**SCW-2M2M009-S2** is a 9" long, semi-rigid coaxial cable with 2.4 mm male connectors that cover the frequency range of DC to 50 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.

**Electrical Specifications:**

| Parameter                 | Minimum | Typical     | Maximum   |
|---------------------------|---------|-------------|-----------|
| Frequency Range           | DC      |             | 50 GHz    |
| Insertion Loss @ 18 GHz   |         | 0.8 dB      |           |
| Insertion Loss @ 26.5 GHz |         | 0.9 dB      |           |
| Insertion Loss @ 40 GHz   |         | 1.1 dB      |           |
| Insertion Loss @ 50 GHz   |         | 1.2 dB      |           |
| Return Loss @ 50 GHz      |         | 17.7 dB     |           |
| Impedance                 |         | 50 $\Omega$ |           |
| Breakdown Voltage         |         | 1500 VRMS   | 2500 VRMS |
| Radiation Shielding       |         | 120 dB      |           |
| Velocity Factor           |         | 76.5%       |           |
| Power Handling @ 50 GHz   |         |             | 15 W (CW) |
| Specification Temperature |         | +25 °C      |           |
| Operating Temperature     | -40 °C  |             | +85 °C    |

**Mechanical Specifications:**

| Item                   | Specification              |
|------------------------|----------------------------|
| Minimum Bending Radius | 0.25"                      |
| Connectors             | 2.4 mm Male                |
| Connector Material     | Passivated Stainless Steel |
| Cable Conductor        | Copper, Tin Plated         |
| Cable Dielectric       | LD PTFE                    |
| Cable Outer Diameter   | 0.0865"                    |
| Length                 | 9"                         |
| Outline                | CW-22-S10                  |

**ECCN**

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**FEATURES**

- High Return Loss
- Low Insertion Loss
- Semi-Rigid

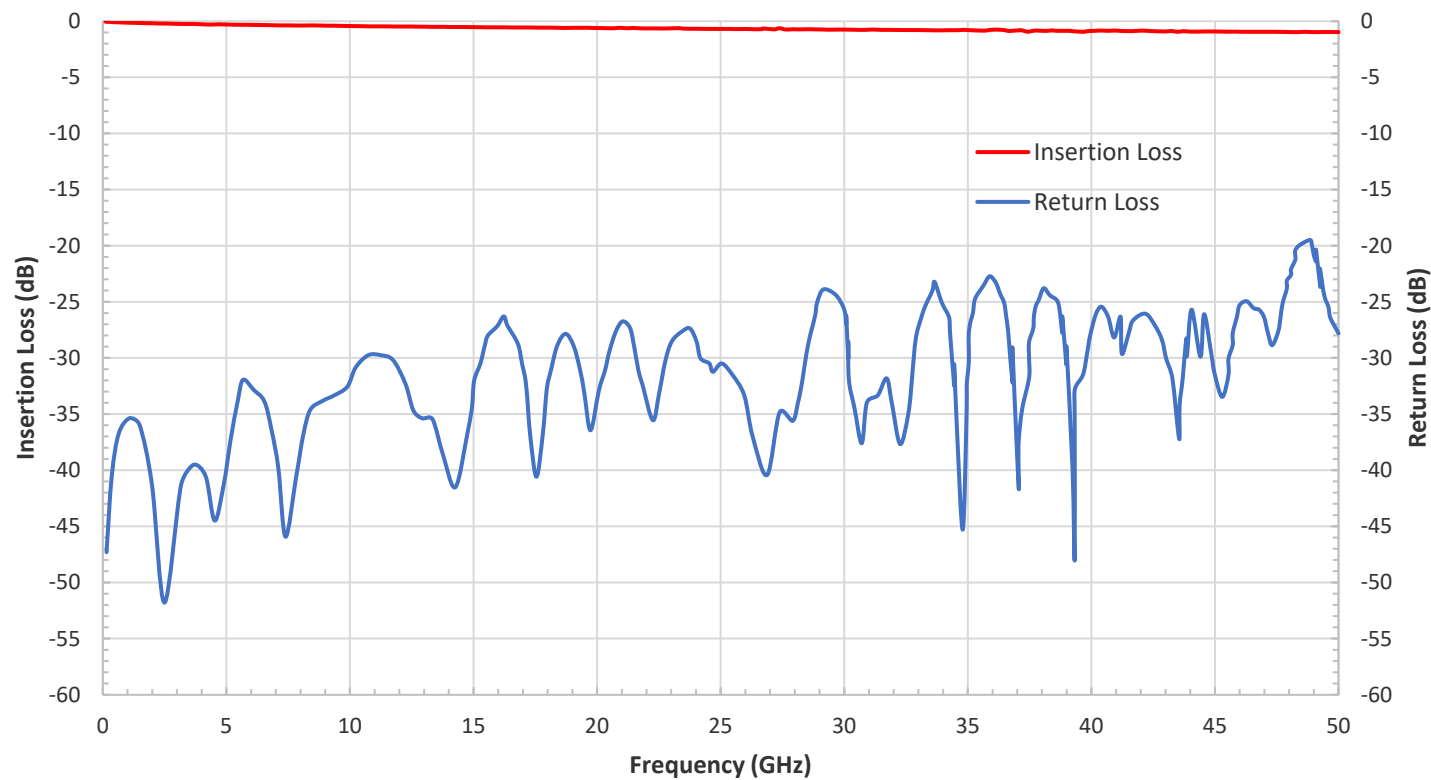
**APPLICATIONS**

- Test Lab
- Sub-assemblies
- System Integration

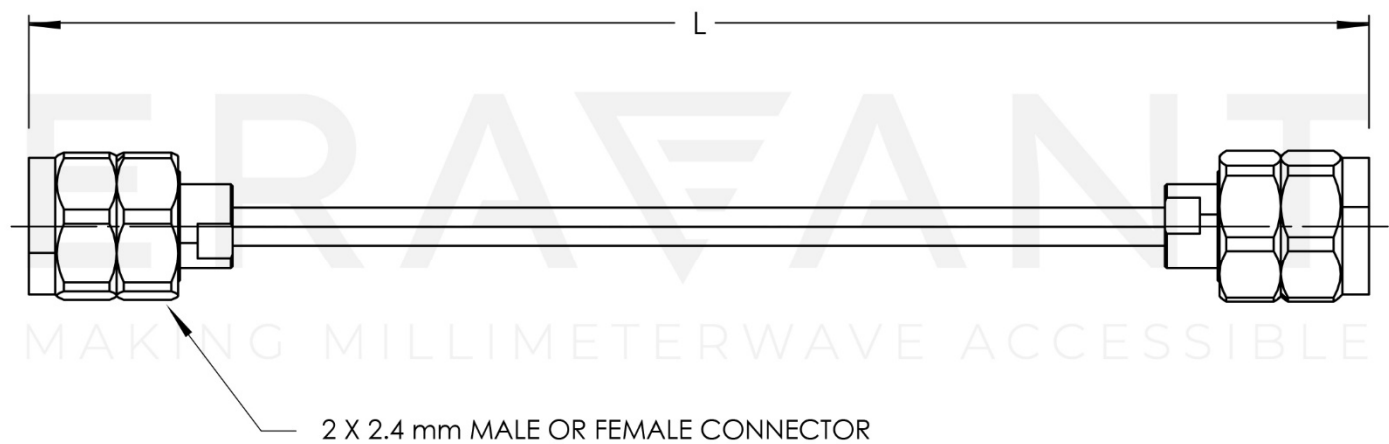
**SUPPLEMENTAL DETAILS**

SCW-2M2M009-S2

Typical Performance vs. Frequency



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



**NOTE:**

LENGTH "L" IS CUSTOMIZABLE

## SCW-2M2M009-S2

**NOTE:**

- Length "L" can be customizable.
- All data presented is collected from a sample lot. Actual data may vary slightly from unit to unit.
- All testing is performed under +25 °C case temperature.
- Eravant 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 should be applied:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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