

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

**SCW-2M2M009-E2** is a 9" long, semi-flexible coaxial cable with 2.4 mm male connectors that cover the frequency range of DC to 50 GHz. The coaxial cable, which is hand formable, 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   |         | 1.0 dB      |           |
| Insertion Loss @ 26.5 GHz |         | 1.2 dB      |           |
| Insertion Loss @ 40 GHz   |         | 1.6 dB      |           |
| Insertion Loss @ 50 GHz   |         | 1.8 dB      |           |
| Return Loss @ 50 GHz      |         | 17.7 dB     |           |
| Impedance                 |         | 50 $\Omega$ |           |
| Breakdown Voltage         |         |             | 1500 VRMS |
| Radiation Shielding       |         | 100 dB      |           |
| Velocity Factor           |         | 70%         |           |
| 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"                                |
| Repeated Bending Radius | 0.787" (< 50 bends)                  |
| Connectors              | 2.4 mm Male                          |
| Connector Material      | Passivated Stainless Steel           |
| Outer Conductor         | Copper, Tin plated, Tin soaked braid |
| Cable Dielectric        | PTFE                                 |
| Cable Outer Diameter    | 0.086"                               |
| Length                  | 9"                                   |
| Outline                 | CW-22-E10                            |

**ECCN**

EAR99

**FEATURES**

- High Return Loss
- Low Insertion Loss
- Semi-Flexible
- Hand-Formable

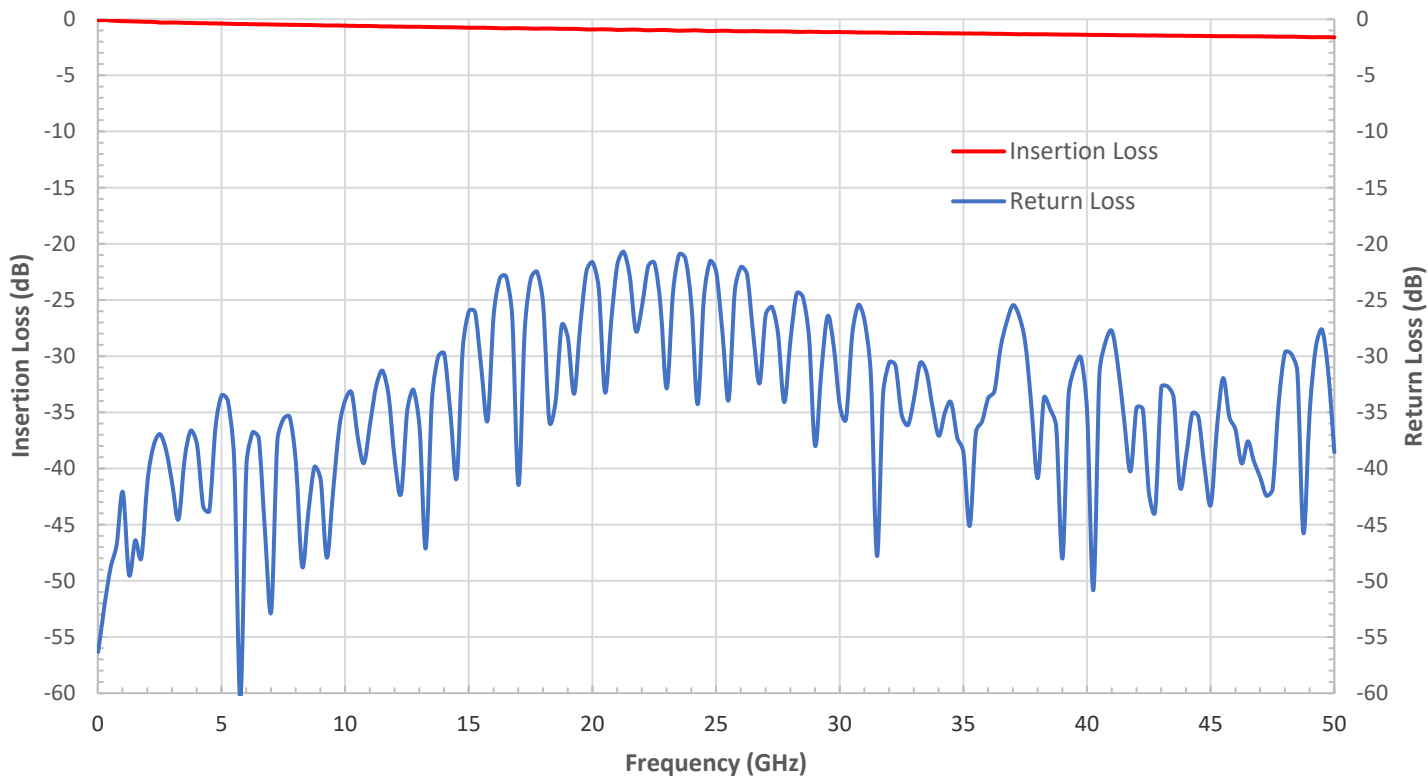
**APPLICATIONS**

- Test Lab
- Sub-assemblies
- System Integration

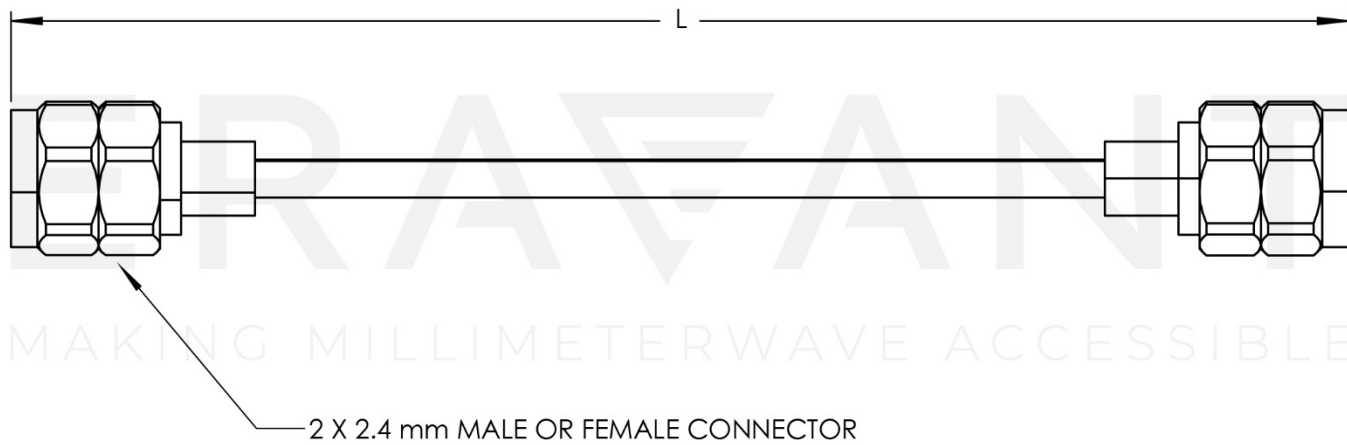
**SUPPLEMENTAL DETAILS**

SCW-2M2M009-E2

Typical Performance vs. Frequency



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



**NOTE:**

LENGTH "L" IS CUSTOMIZABLE

**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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