

2.4 mm(M) to 2.4 mm(M) Coaxial Cable, Semi-Rigid, 12", Phase Matched

SCW-2M2M012-S2-PM is a 12" long, semi-rigid, phase matched 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 | | 1.0 dB | |
| Insertion Loss @ 26.5 GHz | | 1.2 dB | |
| Insertion Loss @ 40 GHz | | 1.4 dB | |
| Insertion Loss @ 50 GHz | | 1.5 dB | |
| Return Loss @ 50 GHz | | 17.7 dB | |
| Impedance | | 50 Ω | |
| Phase Match (Unit to Unit) | | $\pm 25^\circ$ | |
| Breakdown Voltage | | 1500 VRMS | 2500 VRMS |
| Radiation Shielding | | 120 dB | |
| Velocity Factor | | 76.5% | |
| Power Handling @ 50 GHz | | | 15 W (CW) |
| Specification Temperature | | +25 $^\circ\text{C}$ | |
| Operating Temperature | -40 $^\circ\text{C}$ | | +85 $^\circ\text{C}$ |

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 | 12" |
| Outline | CW-22-S10 |

ECCN

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FEATURES

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

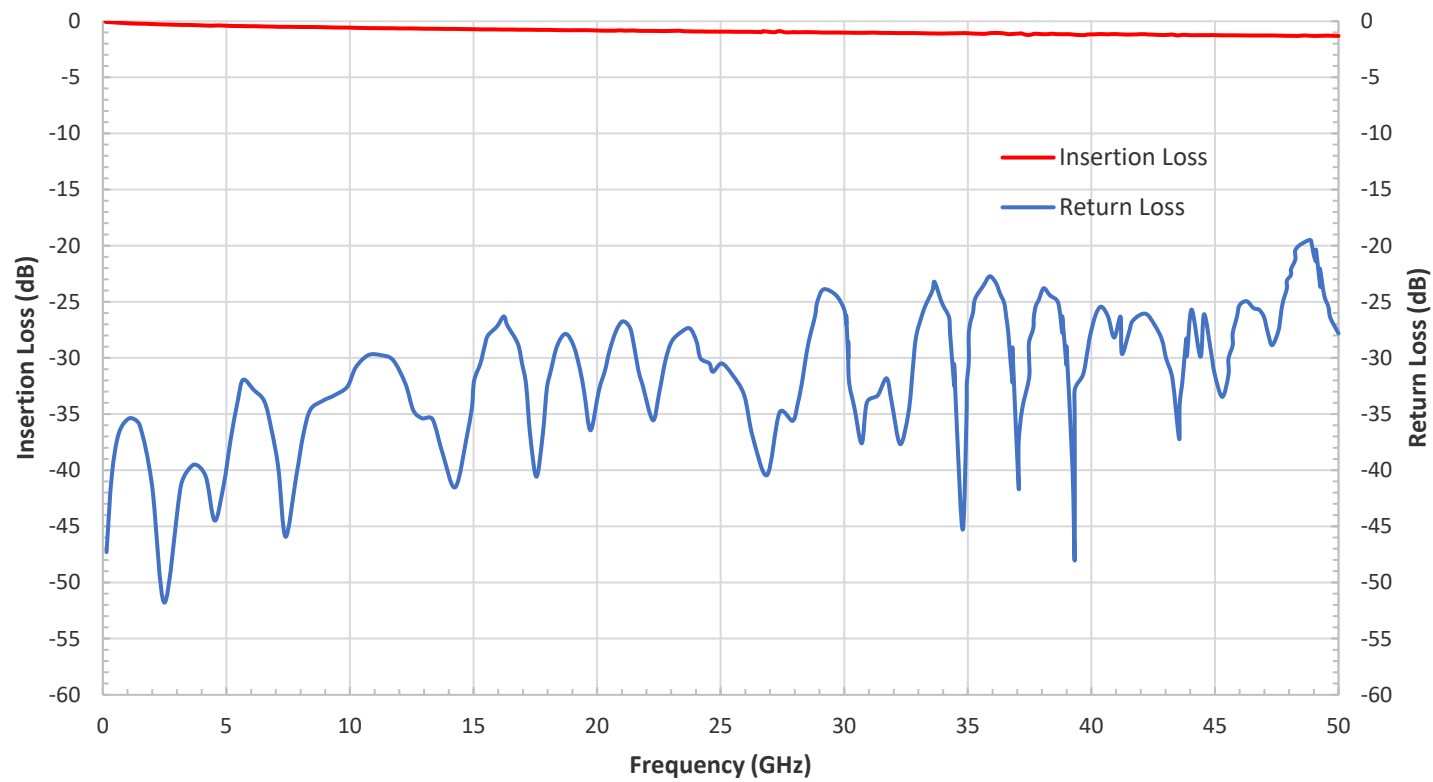
APPLICATIONS

- Test Lab
- Sub-assemblies
- System Integration

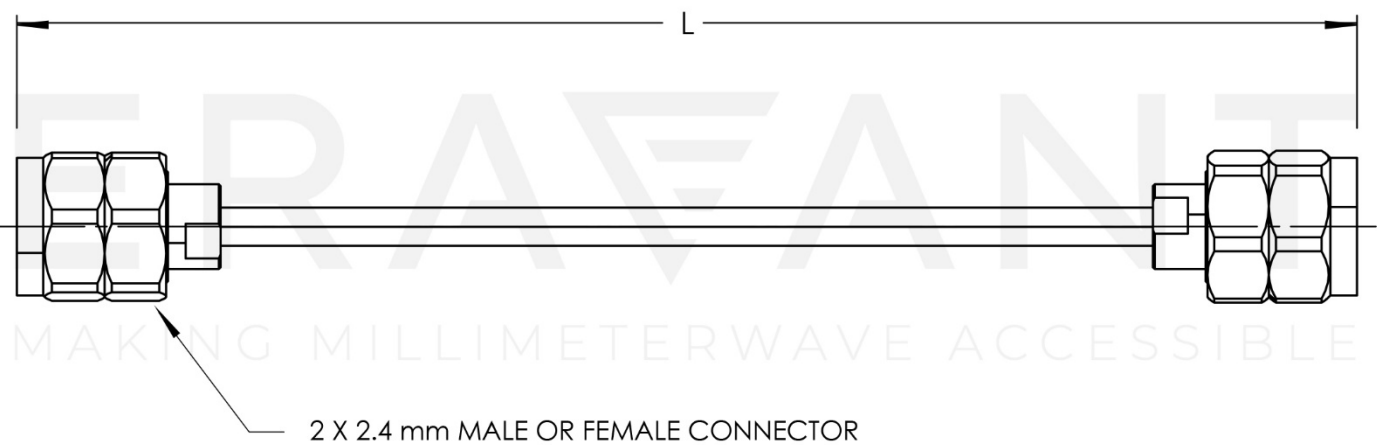
SUPPLEMENTAL DETAILS

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Typical Performance vs. Frequency



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



NOTE:

LENGTH "L" IS CUSTOMIZABLE

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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 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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