

2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Flexible, 12", Phase Matched

SCW-2M2M012-F2-PM is a 12" long, flexible, phase matched coaxial cable with 2.4 mm male connectors that cover the frequency range of DC to 50 GHz. The coaxial cable utilizes the highest quality test instrumentation grade cable 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 | | < 1.3 dB | |
| Insertion Loss @ 40 GHz | | < 1.6 dB | |
| Insertion Loss @ 50 GHz | | < 1.8 dB | |
| Return Loss @ 50 GHz | | 17.7 dB | |
| Impedance | | 50 Ω | |
| Phase Match (Unit to Unit) | | $\pm 25^\circ$ | |
| Breakdown Voltage | | | 500 Volts |
| Shielding Effectiveness | 90 dB | 100 dB | |
| 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 |
|----------------------------|--------------------------------------|
| Connectors | 2.4 mm Male |
| Connector Contact Material | Be-Cu / Gold Plating per MIL-G-45204 |
| Connector Material | Passivated Stainless Steel |
| Connector Dielectric | PEEK/PEI |
| Cable Dielectric | ePTFE |
| Cable Jacket Material | PFA |
| Cable Outer Diameter | 0.085" |
| Length | 12" |
| Minimum Bending Radius | 0.5" |
| Weight | 0.8 Oz |
| Outline | CW-22-F10 |

ECCN

EAR99

FEATURES

- High Return Loss
- Low Insertion Loss
- Flexible and Durable

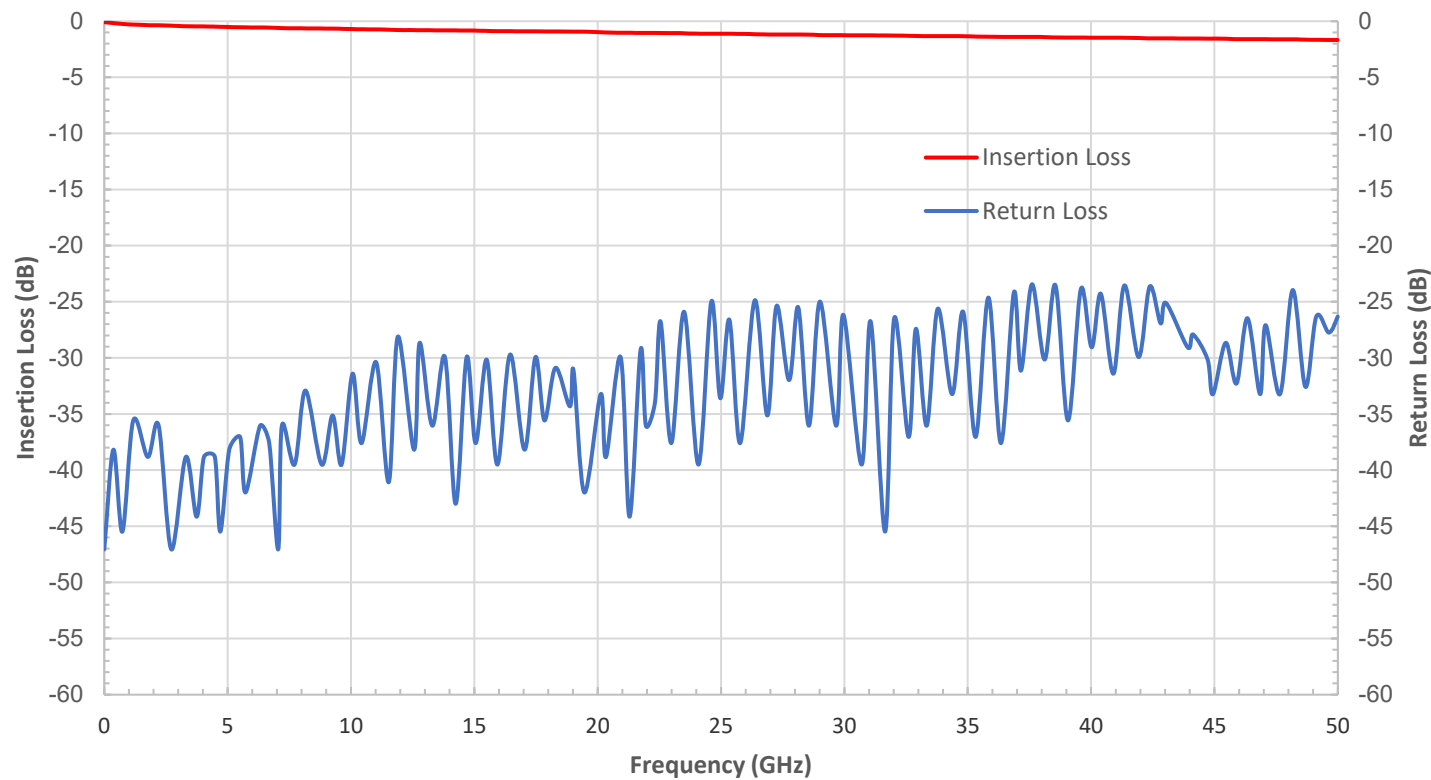
APPLICATIONS

- Test Lab
- Sub-assemblies

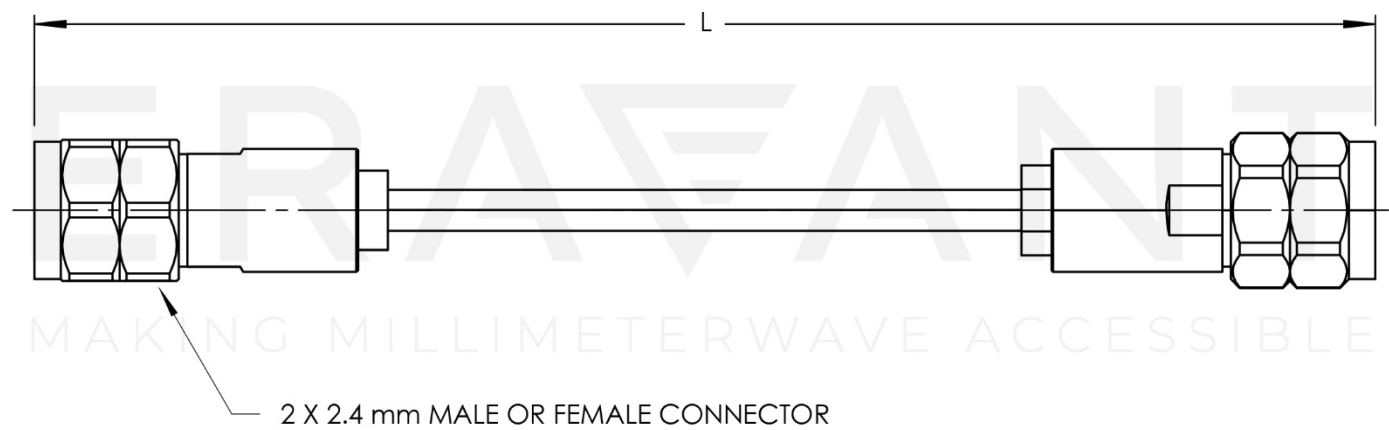
SUPPLEMENTAL DETAILS

SCW-2M2M012-F2-PM

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.