

## 2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Semi-Flexible, 3"

**SCW-2M2M003-E2** is a 3" 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   |         | 0.4 dB  |           |
| Insertion Loss @ 26.5 GHz |         | 0.5 dB  |           |
| Insertion Loss @ 40 GHz   |         | 0.6 dB  |           |
| Insertion Loss @ 50 GHz   |         | 0.7 dB  |           |
| Return Loss @ 50 GHz      |         | 17.7 dB |           |
| Impedance                 |         | 50 Ω    |           |
| 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                  | 3" VIILLIMEIERVVA                    |  |
| Outline                 | CW-22-E10                            |  |

#### **ECCN**

EAR99

## **FEATURES**

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

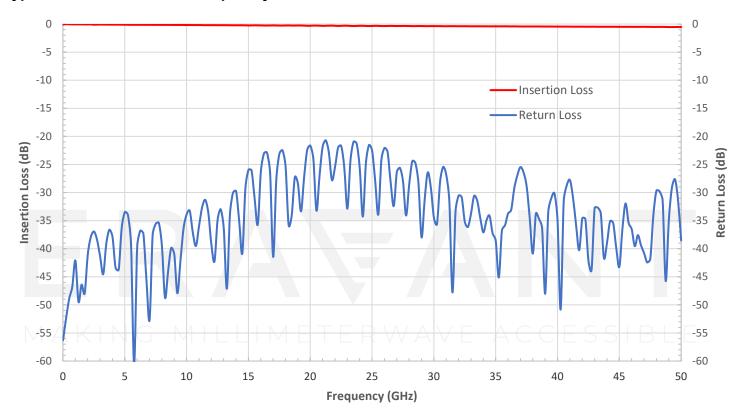
#### **APPLICATIONS**

- Test Lab
- Sub-assemblies
- · System Integration

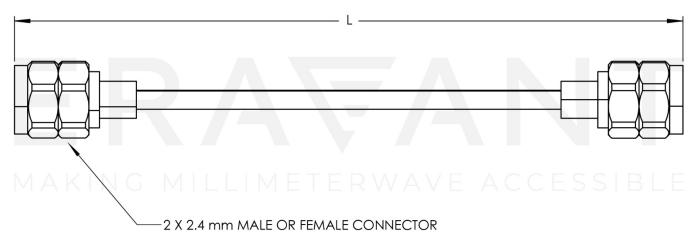
## SUPPLEMENTAL DETAILS



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

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