

## SCW-2M2M003-M1-PM

### 2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Super Bendable, 3", Phase Matched

**SCW-2M2M003-M1-PM** is a 3" long, Super Bendable, phase matched coaxial cable with 2.4 mm male connectors that covers the frequency range of DC to 50 GHz. The coaxial cable, which is hand formable with good bendability, can be bent from the root of the connectors. It 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		< 0.5 dB	
Insertion Loss @ 26.5 GHz		< 0.8 dB	
Insertion Loss @ 40 GHz		< 1.0 dB	
Insertion Loss @ 50 GHz		< 1.1 dB	
Return Loss @ 50 GHz		16 dB	
Impedance		50 $\Omega$	
Phase Match (Unit to Unit)		$\pm 10^\circ$	
Breakdown Voltage			500 V
Radiation Shielding		90 dB	
Velocity Factor		76%	
Power Handling @ 50 GHz			13 W (CW)
Specification Temperature		+25 $^\circ\text{C}$	
Operating Temperature	-40 $^\circ\text{C}$		+85 $^\circ\text{C}$

#### ECCN

EAR99

#### FEATURES

- High Return Loss
- Low Insertion Loss
- Hand-Formable
- Good Bendability
- Bendable from the Root of Connectors

#### APPLICATIONS

- Test Lab
- Sub-Assemblies
- System Integration

#### SUPPLEMENTAL DETAILS

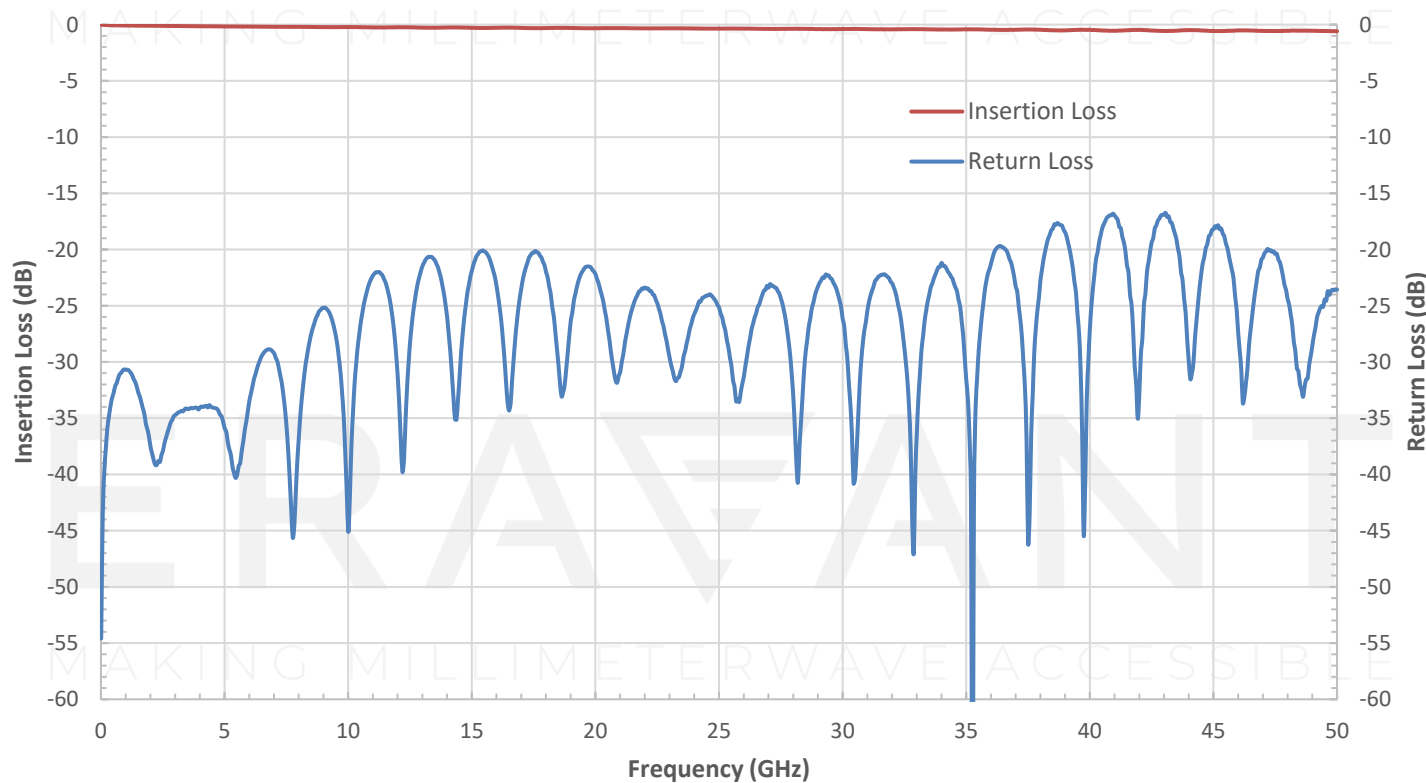


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Mechanical Specifications:

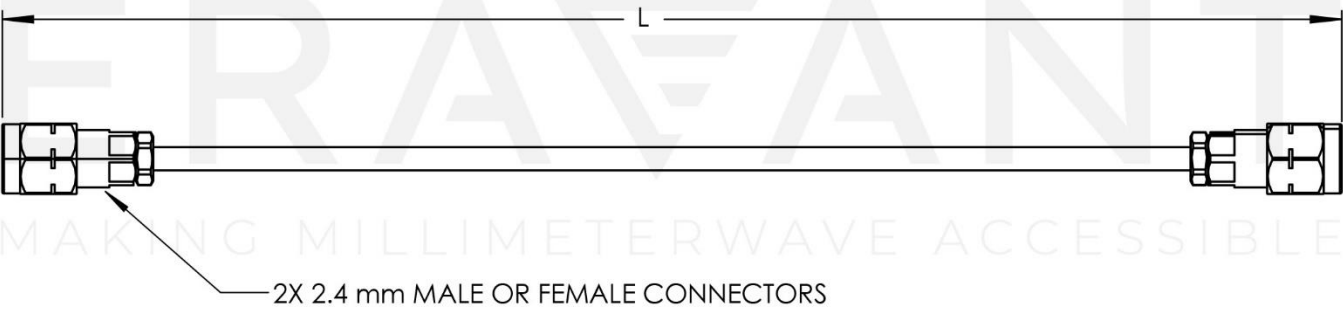
Item	Specification
Connectors	2.4 mm Male
Connector Contact Material	Beryllium Copper, Gold Plated
Connector Material	Passivated Stainless Steel
Connector Dielectric	PEI
Cable Dielectric	PTFE
Cable Jacket	FEP
Minimum Bending Radius	0.417"
Cable Outer Diameter	0.104"
Length	3"
Outline	CW-22-M8

Typical Performance vs. Frequency



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**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.