

2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Flexible, 3", Phase Matched

SCW-2M2M003-F2-PM is a 3" 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		< 0.3 dB	
Insertion Loss @ 26.5 GHz		< 0.4 dB	
Insertion Loss @ 40 GHz		< 0.5 dB	
Insertion Loss @ 50 GHz		< 0.6 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	3"
Minimum Bending Radius	0.5"
Weight	0.6 Oz
Outline	CW-22-F10

ECCN

EAR99

FEATURES

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

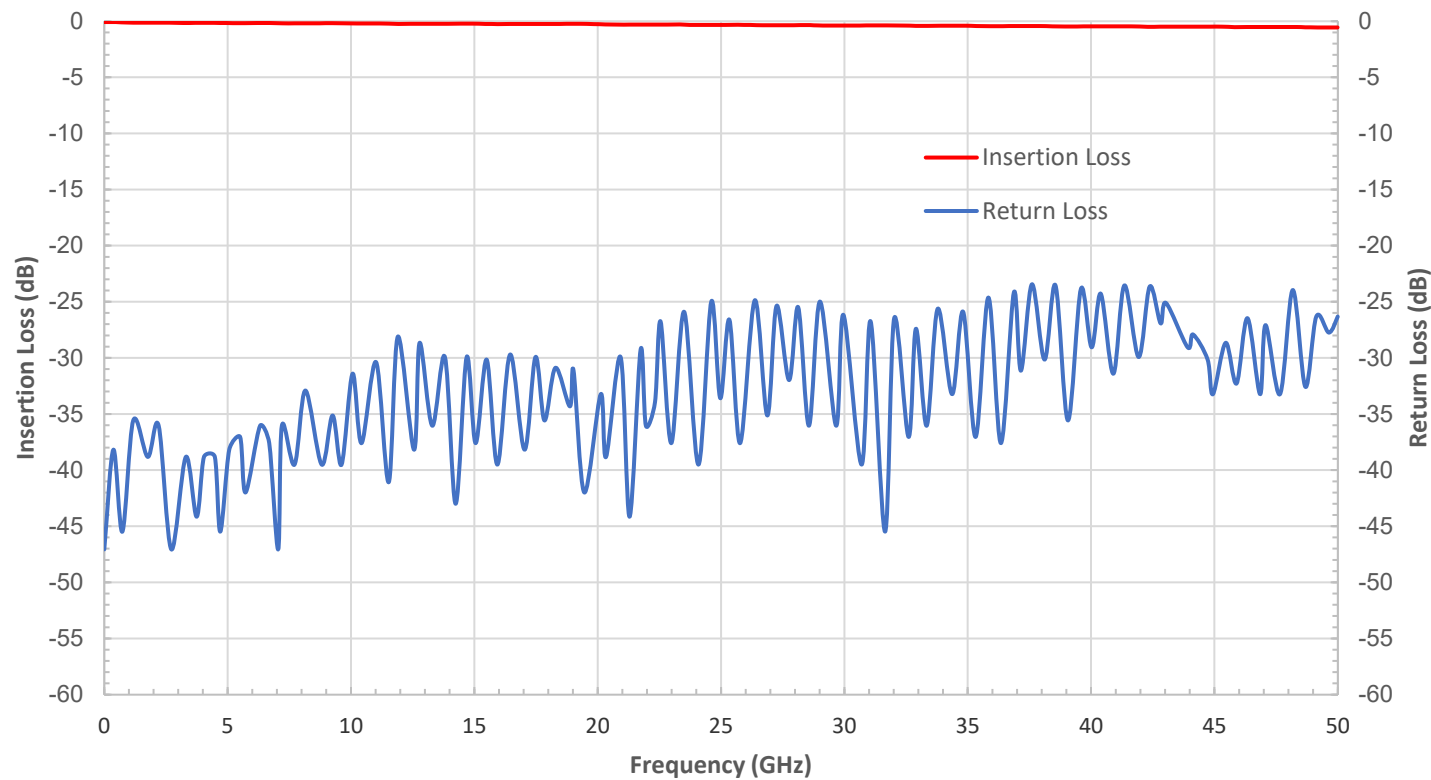
APPLICATIONS

- Test Lab
- Sub-assemblies

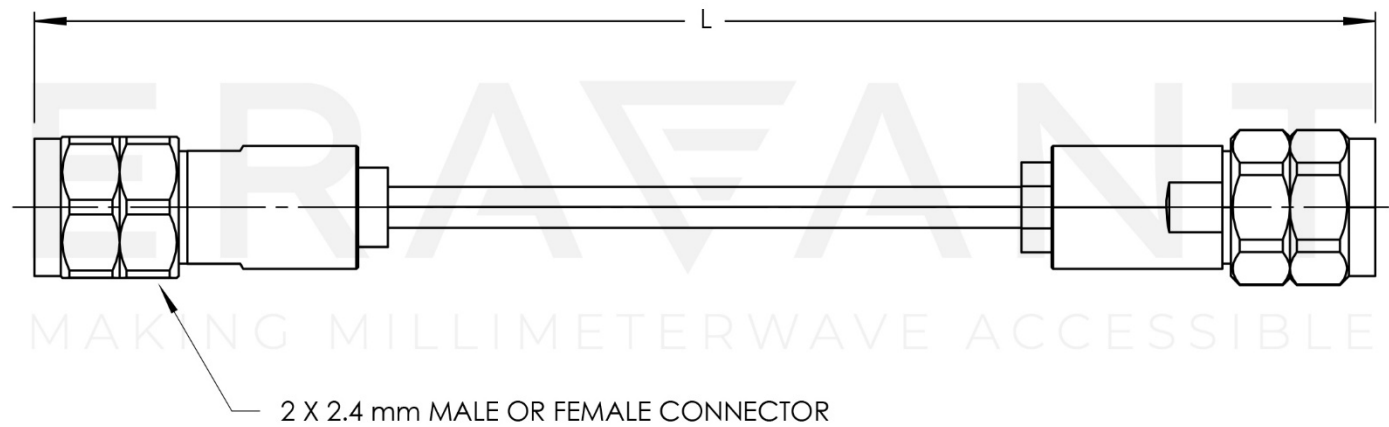
SUPPLEMENTAL DETAILS

SCW-2M2M003-F2-PM

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 SCH-08008-S1 is highly recommended.

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