

2.4 mm (F) to 2.4 mm (M) Coaxial Cable, Flexible, 4", Phase Matched

SCW-2F2M004-F2-PM is a 4" long, flexible, phase matched coaxial cable with a 2.4 mm female connector and a 2.4 mm male connector that covers 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		< 0.5 dB	
Insertion Loss @ 26.5 GHz		< 0.7 dB	
Insertion Loss @ 40 GHz		< 0.8 dB	
Insertion Loss @ 50 GHz		< 1.0 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 °C	
Operating Temperature	-40 °C		+85 °C

ECCN

EAR99

FEATURES

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

APPLICATIONS

- Test Lab
- Sub-assemblies

SUPPLEMENTAL DETAILS

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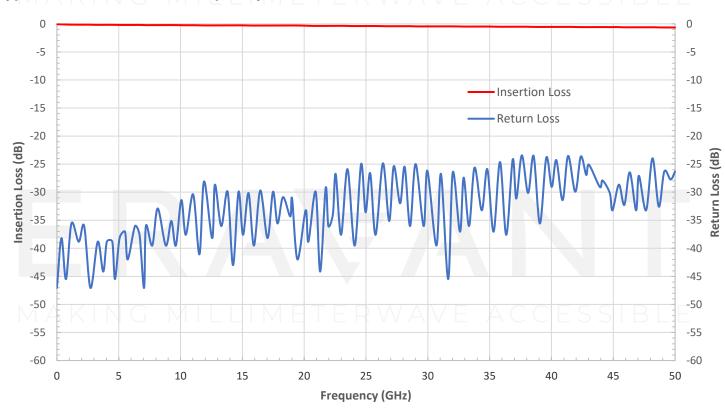




Mechanical Specifications:

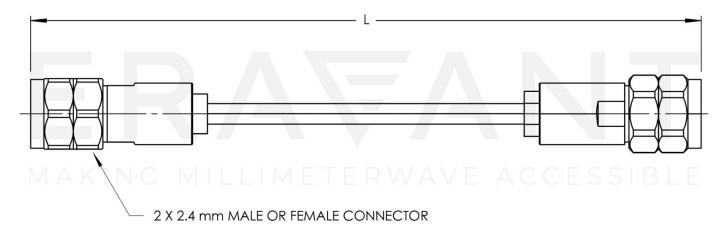
Item	Specification
Connector 1	2.4 mm Female
Connector 2	2.4 mm Male
Connector Contact Material	Be-Cu / Gold Plating per MIL-G-45204
Connector Material	Passivated Stainless Steel
Connector Dielectric	PEEK/PEI
Cable Dielectric	ePTFE
Cable Jacket Material	PFA
Cable Outer Diameter	0.085"
Length	4"
Minimum Bending Radius	0.5"
Weight	0.7 Oz
Outline	CW-22-F10

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 <u>SCH-08008-S1</u> is highly recommended.

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