

2.4 mm(M) to 2.4 mm(M) Coaxial Cable, Semi-Rigid, 3", Phase Matched

SCW-2M2M003-S2-PM is a 3" long, semi-rigid, phase matched coaxial cable with 2.4 mm male connectors that cover the frequency range of DC to 50 GHz. The coaxial cable 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		0.3 dB	
Insertion Loss @ 26.5 GHz		0.4 dB	
Insertion Loss @ 40 GHz		0.4 dB	
Insertion Loss @ 50 GHz		0.5 dB	
Return Loss @ 50 GHz		17.7 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		$\pm 25^\circ$	
Breakdown Voltage		1500 VRMS	2500 VRMS
Radiation Shielding		120 dB	
Velocity Factor		76.5%	
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
Minimum Bending Radius	0.25"
Connectors	2.4 mm Male
Connector Material	Passivated Stainless Steel
Cable Conductor	Copper, Tin Plated
Cable Dielectric	LD PTFE
Cable Outer Diameter	0.0865"
Length	3"
Outline	CW-22-S10

ECCN

EAR99

FEATURES

- High Return Loss
- Low Insertion Loss
- Semi-Rigid

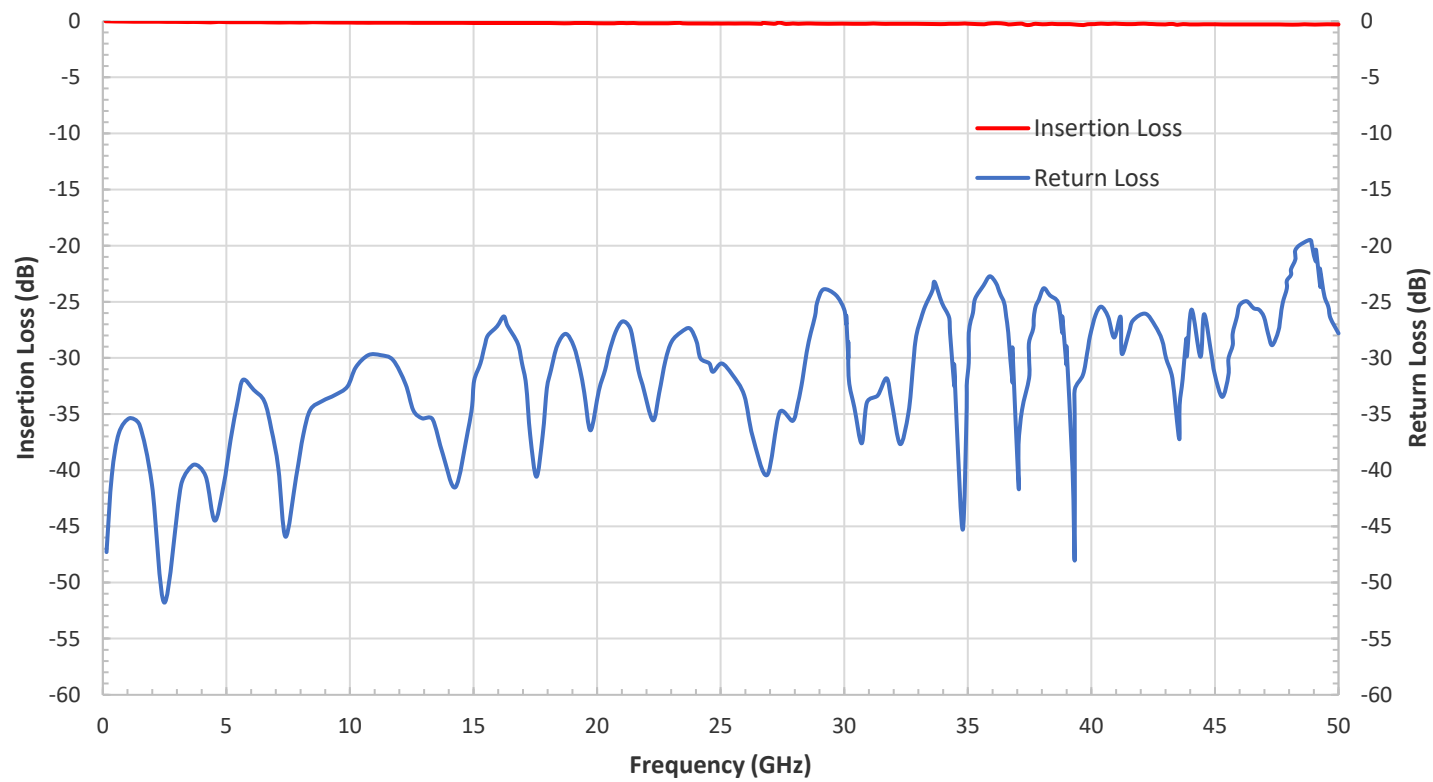
APPLICATIONS

- Test Lab
- Sub-assemblies
- System Integration

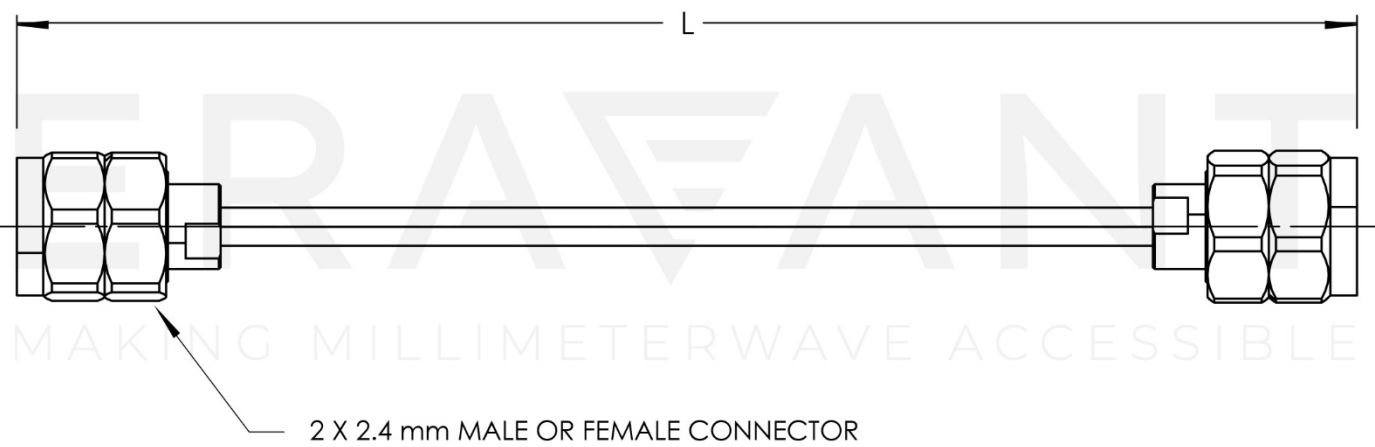
SUPPLEMENTAL DETAILS

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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.

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