# Rev 1.0

# 1 mm (M) to 1 mm (M) Coaxial Cable, Flexible, 18", Phase Matched

**SCW-1M1M018-F2-PM** is a 18" long, flexible, phase matched coaxial cable with 1 mm male connectors that cover the frequency range of DC to 110 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		110 GHz
Insertion Loss		10 dB	
Return Loss		14 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		$\pm$ 55°	
Power Handling			2 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+100 °C

# Mechanical Specifications:

Item	Specification	
Connectors	1 mm Male	
Connector Material	Passivated Stainless Steel	
Connector Inner Conductor	Beryllium Copper	
Connector Insulator Material	PEI	
Cable Center Conductor	Silver Plated Copper	
Cable Dielectric	PTFE	
Cable Outer Sheath	Fluorinated Ethylene Propylene (FEP)	
Cable Outer Diameter	0.062"	
Length	18"	
Minimum Bending Radius	0.200"	
Repeated Bending Radius	0.375"	
Weight	0.7 Oz	
Outline	CW-11-F10	

# ECCN

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#### FEATURES

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

# APPLICATIONS

- Test Lab
- Sub-assemblies

# SUPPLEMENTAL DETAILS

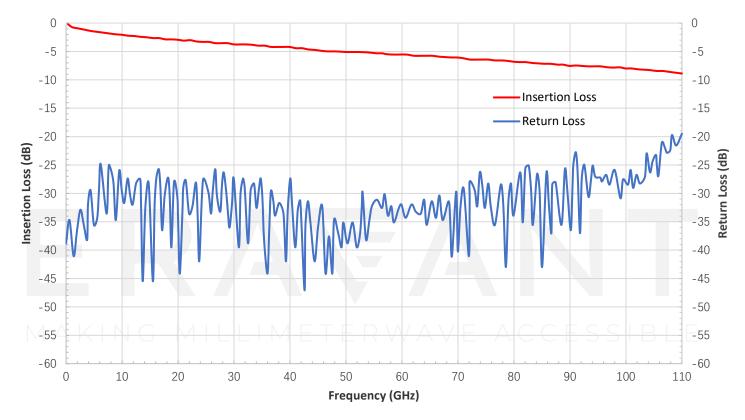


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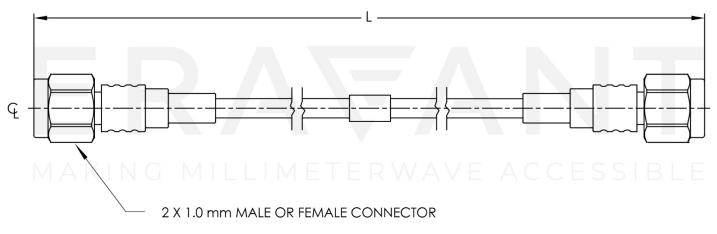


# SCW-1M1M018-F2-PM

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: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model <u>SCH-06004-S1</u> is highly recommended.

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