SCW-1M1M003-S2-PM

1 mm (M) to 1 mm (M) Coaxial Cable, Semi-Rigid, 3”, Phase Matched

SCW-1M1M003-S2-PM is a 3” long, semi-rigid, 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 and capacitance of 95 pF/m. Other lengths are offered under different models.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		110 GHz
Insertion Loss		2.0 dB	
Return Loss @ DC to 40 GHz		18 dB	
Return Loss @ 40 to 60 GHz		16 dB	
Return Loss @ 60 to 110 GHz		13 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		± 55°	
Velocity Factor		76.5%	
Power Handling @ 100 GHz			2 W (CW)
Capacitance		95 pF/m	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+100 °C

Mechanical Specifications:

Item	Specification
Minimum Bending Radius	0.125”
Connectors	1 mm Male
Connector Material	Passivated Stainless Steel
Cable Inner Conductor Material	Copper, Silver Plated
Cable Insulator Material	LD PTFE
Cable Outer Conductor Material	Oxygen-free Copper
Cable Outer Diameter	0.047”
Length	3”
Weight	0.15 Oz
Outline	CW-11-S10

ECCN

EAR99

FEATURES

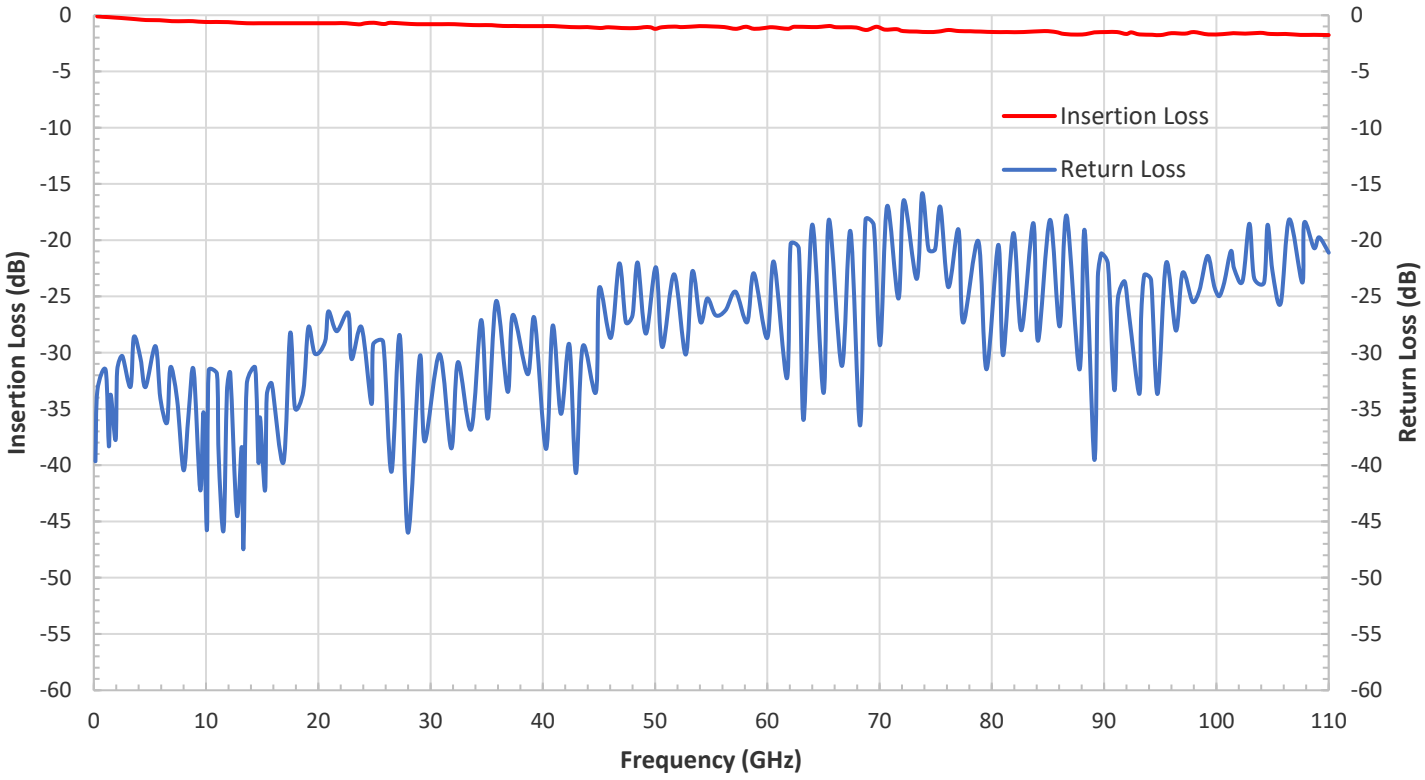
- High Return Loss
- Low Insertion Loss
- Semi-Rigid

APPLICATIONS

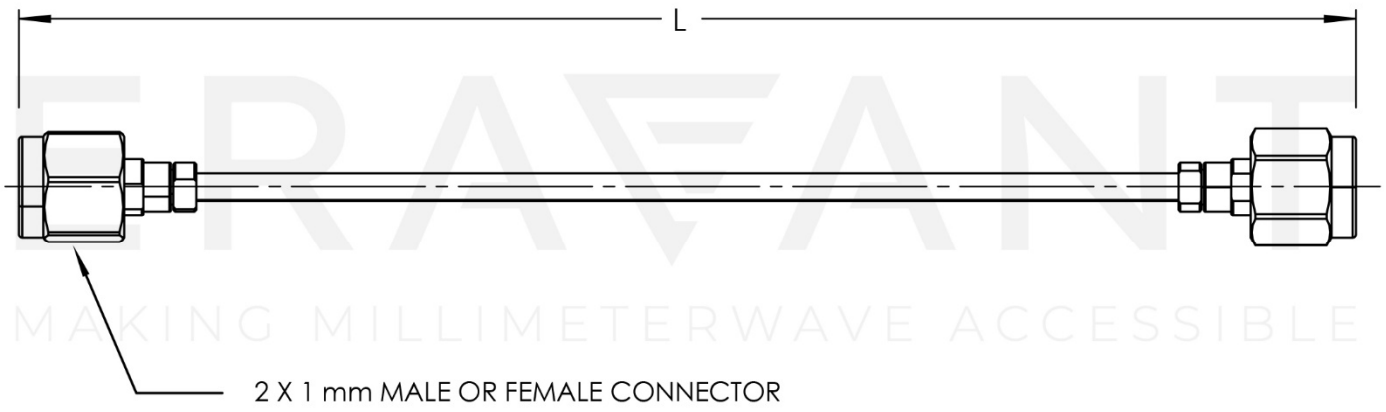
- Test Lab
- Sub-assemblies
- System Integration

SUPPLEMENTAL DETAILS

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