

1.85 mm (M) to 1.85 mm (M) Coaxial Cable, Semi-Flexible, 3", Phase Matched

SCW-VMVM003-E2-PM is a 3" long, semi-flexible, phase matched coaxial cable with 1.85 mm (V) male connectors that cover the frequency range of DC to 67 GHz. The coaxial cable, which is hand formable, 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		67 GHz
Insertion Loss @ 18 GHz		0.4 dB	
Insertion Loss @ 26.5 GHz		0.6 dB	
Insertion Loss @ 40 GHz		0.7 dB	
Insertion Loss @ 50 GHz		0.8 dB	
Insertion Loss @ 67 GHz		1.0 dB	
Return Loss @ 67 GHz		16 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		$\pm 33^\circ$	
Breakdown Voltage			1500 VRMS
Radiation Shielding		100 dB	
Velocity Factor		70%	
Power Handling @ 67 GHz			8 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"
Repeated Bending Radius	0.787" (< 50 bends)
Connectors	1.85 mm (V) Male
Connector Material	Passivated Stainless Steel
Outer Conductor	Copper, Tin plated, Tin soaked braid
Cable Dielectric	PTFE
Cable Outer Diameter	0.086"
Length	3"
Outline	CW-VV-E10

ECCN

EAR99

FEATURES

- High Return Loss
- Low Insertion Loss
- Semi-Flexible
- Hand-Formable

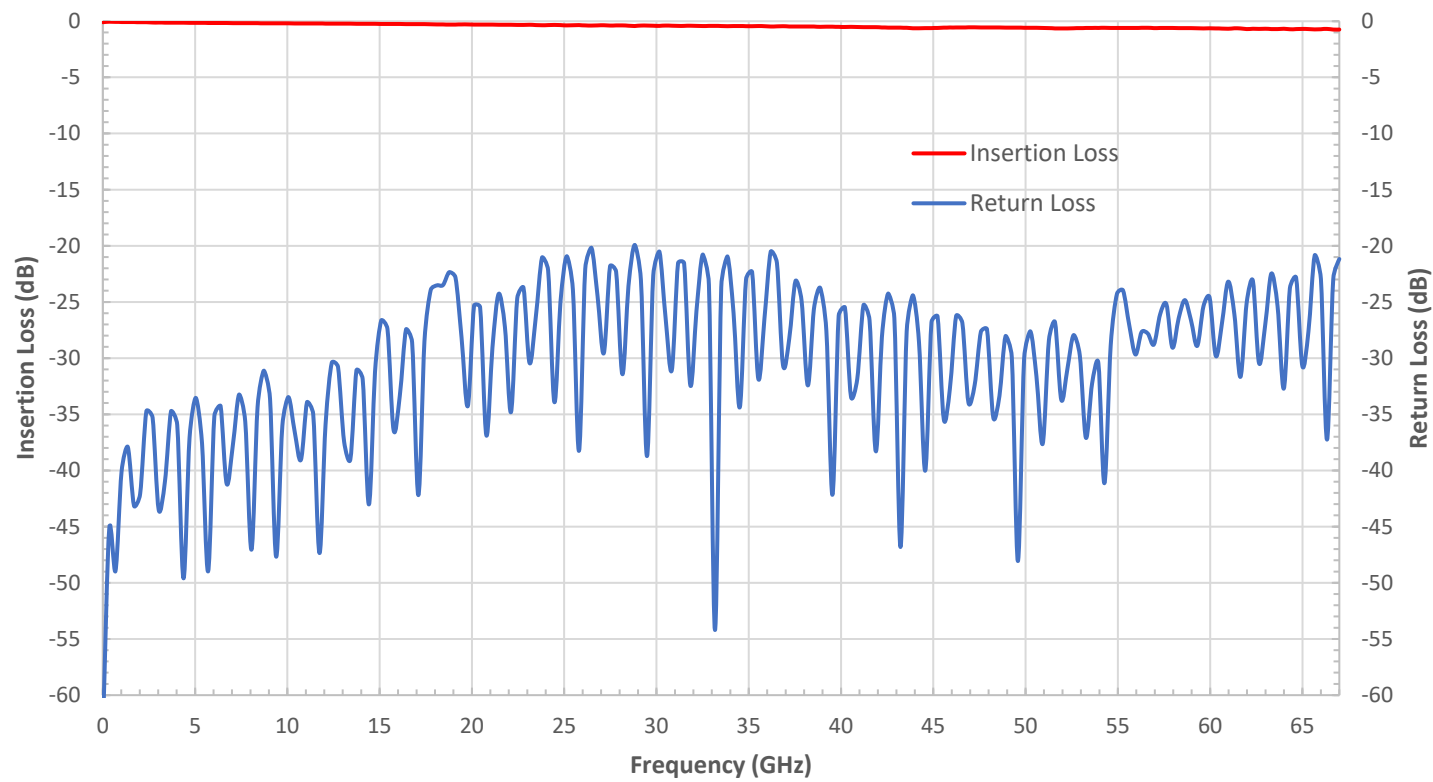
APPLICATIONS

- Test Lab
- Sub-assemblies
- System Integration

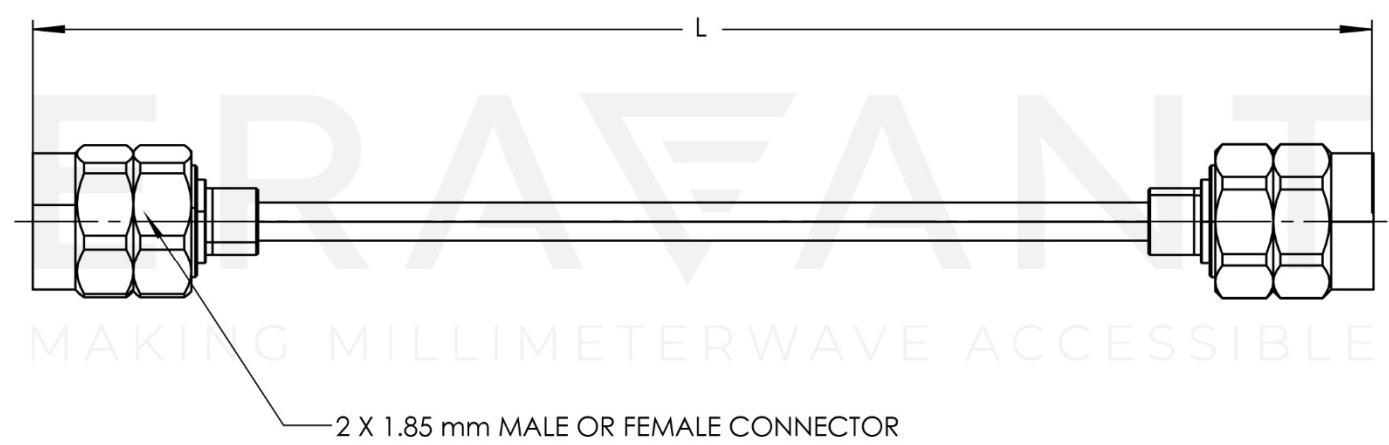
SUPPLEMENTAL DETAILS

SCW-VMVM003-E2-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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