

1.85 mm (M) to 1.85 mm (M) Coaxial Cable, Semi-Rigid, 18", Phase Matched

SCW-VMVM018-S2-PM is a 18" long, semi-rigid, phase matched coaxial cable with 1.85 mm (V) male connectors that cover the frequency range of DC to 64 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		64 GHz*
Insertion Loss @ 18 GHz		1.5 dB	
Insertion Loss @ 26.5 GHz		1.8 dB	
Insertion Loss @ 40 GHz		2.2 dB	
Insertion Loss @ 50 GHz		2.5 dB	
Insertion Loss @ 64 GHz		2.7 dB	
Return Loss @ 64 GHz		16 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		$\pm 32^\circ$	
Breakdown Voltage		1500 VRMS	2500 VRMS
Radiation Shielding		120 dB	
Velocity Factor		76.5%	
Power Handling @ 64 GHz			10 W (CW)
Specification Temperature		+25 $^\circ\text{C}$	
Operating Temperature	-40 $^\circ\text{C}$		+85 $^\circ\text{C}$

*The highest operation frequency is 67 GHz.

Mechanical Specifications:

Item	Specification
Minimum Bending Radius	0.25"
Connectors	1.85 mm (V) Male
Connector Material	Passivated Stainless Steel
Cable Conductor	Copper, Tin Plated
Cable Dielectric	LD PTFE
Cable Outer Diameter	0.0865"
Length	18"
Outline	CW-VV-S10

ECCN

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FEATURES

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

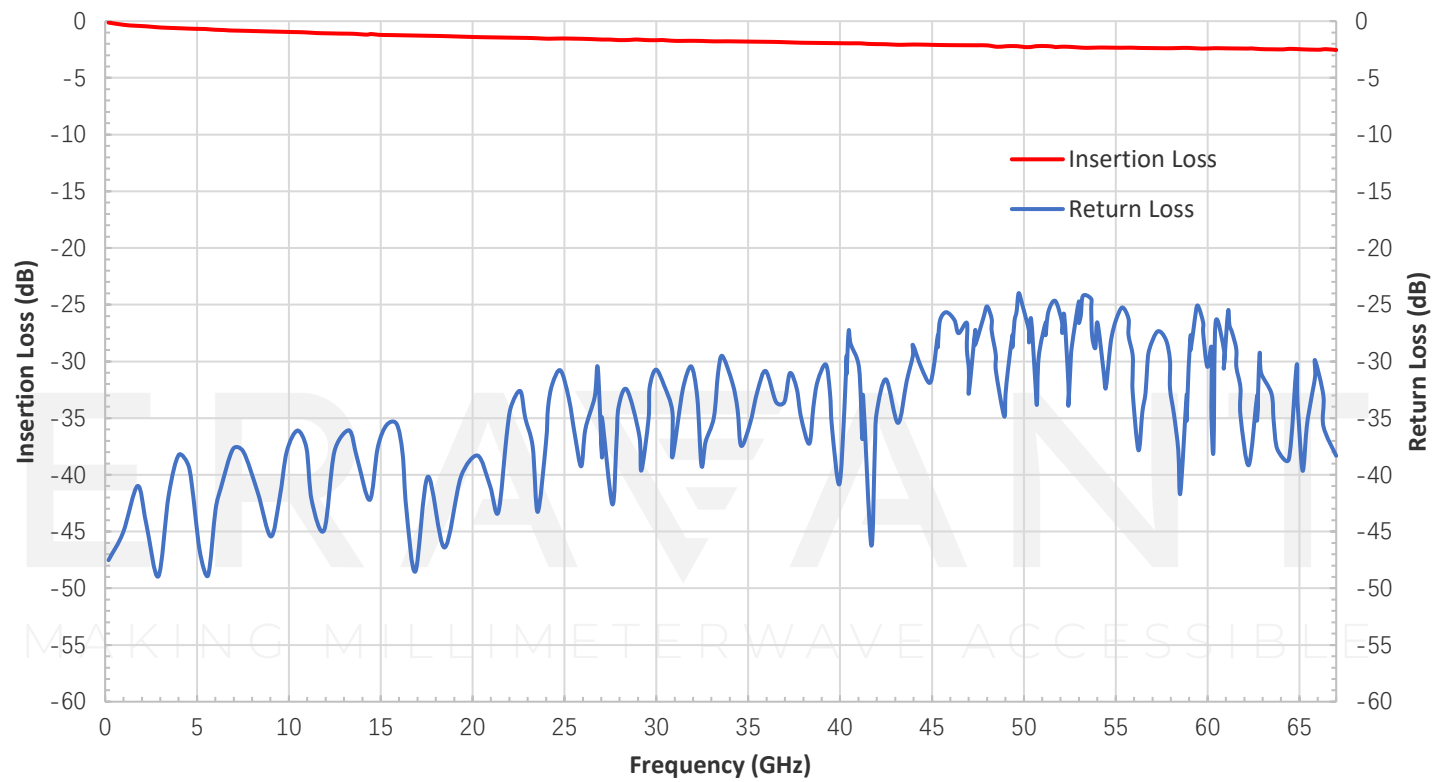
APPLICATIONS

- Test Lab
- Sub-assemblies
- System Integration

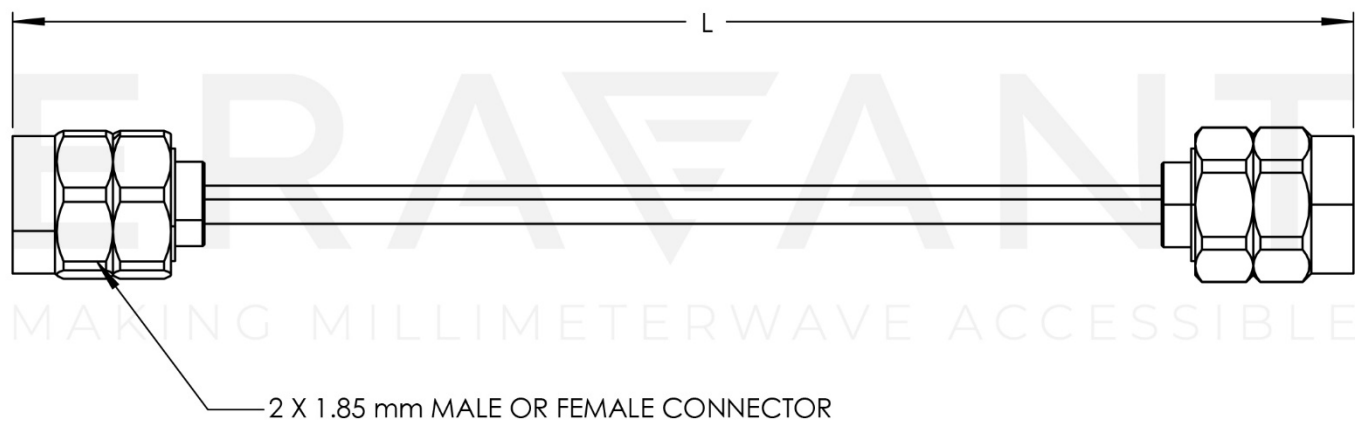
SUPPLEMENTAL DETAILS

SCW-VMVM018-S2-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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