

## SCW-EMEM018-S2-PM

1.35 mm (M) to 1.35 mm (M) Coaxial Cable, Semi-Rigid, 18”  
Phase Matched

**SCW-EMEM018-S2-PM** is a 18” long, semi-rigid, phase matched coaxial cable with 1.35 mm male connectors that cover the frequency range of DC to 90 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		90 GHz
Insertion Loss		6.4 dB	
Return Loss @ DC to 40 GHz		18 dB	
Return Loss @ 40 to 60 GHz		16 dB	
Return Loss @ 60 to 90 GHz		13 dB	
Impedance		50 $\Omega$	
Phase Match (Unit to Unit)		$\pm 45^\circ$	
Velocity Factor		76.5%	
Power Handling @ 90 GHz			9 W (CW)
Capacitance		95 pF/m	
Specification Temperature		+25 $^\circ\text{C}$	
Operating Temperature	-40 $^\circ\text{C}$		+100 $^\circ\text{C}$

## Mechanical Specifications:

Item	Specification
Minimum Bending Radius	0.125”
Connectors	1.35 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	18”
Weight	0.22 Oz
Outline	CW-EE-S10

## ECCN

EAR99

## FEATURES

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

## APPLICATIONS

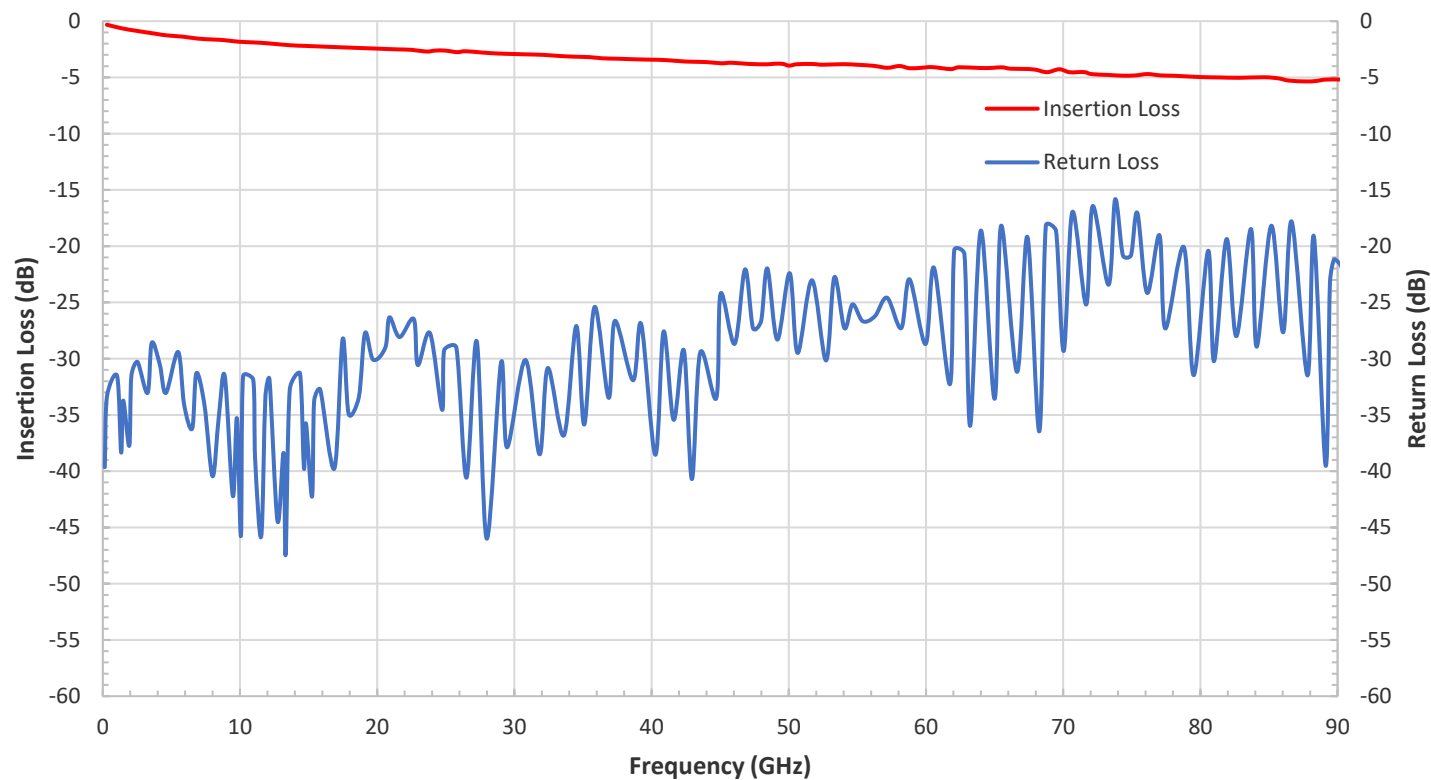
- Test Lab
- Sub-assemblies
- System Integration

## SUPPLEMENTAL DETAILS

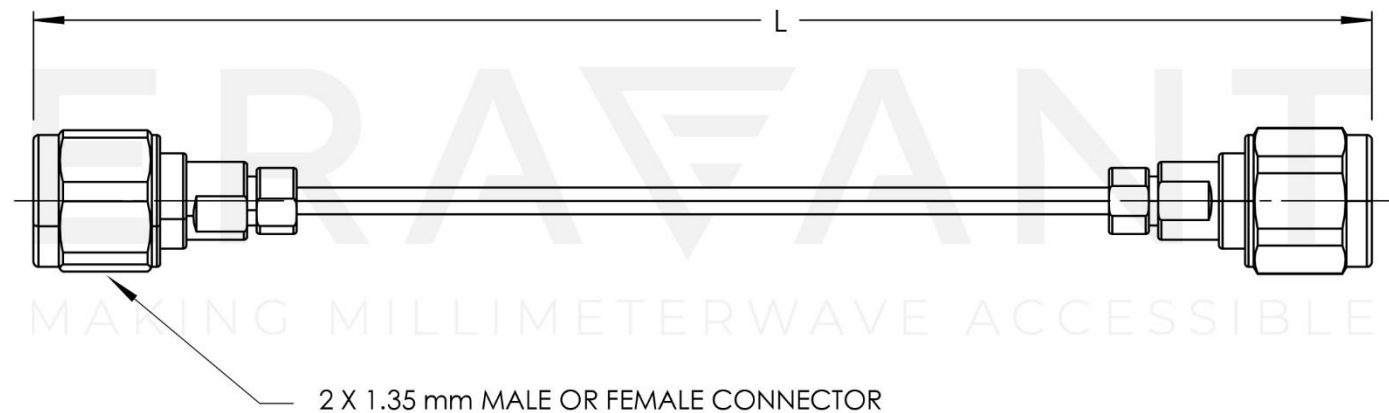


SCW-EMEM018-S2-PM

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:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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