

# 2.92 mm (M) to 2.92 mm (M) Coaxial Cable, Semi-Flexible, 18", Phase Matched

**SCW-KMKM018-E2-PM** is a 18" long, semi-flexible, phase matched coaxial cable with 2.92 mm (K) male connectors that cover the frequency range of DC to 40 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		40 GHz
Insertion Loss @ 18 GHz		< 1.9 dB	
Insertion Loss @ 26.5 GHz		< 2.4 dB	
Insertion Loss @ 32 GHz		< 2.6 dB	
Insertion Loss @ 40 GHz		< 3.0 dB	
Return Loss @ 40 GHz		19 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		± 20°	
Breakdown Voltage			1500 VRMS
Radiation Shielding		100 dB	
Velocity Factor		70%	
Power Handling @ 40 GHz			18 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

# **Mechanical Specifications:**

Item	Specification	
Minimum Bending Radius	0.25"	
Repeated Bending Radius	0.787" (< 50 bends)	
Connectors	2.92 mm (K) Male	
Connector Material	Passivated Stainless Steel	
Outer Conductor	Copper, Tin plated, Tin soaked braid	
Cable Dielectric	PTFE/         A E T E D \A/A	
Cable Outer Diameter	0.086"	
Length	18"	
Outline	CW-KK-E10	

# **ECCN**

EAR99

# **FEATURES**

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

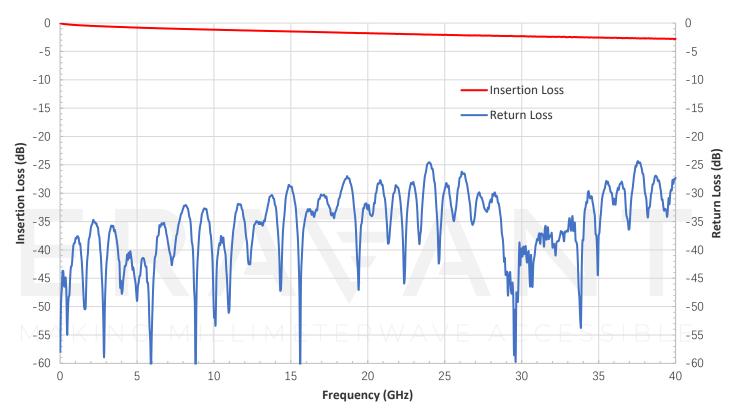
## **APPLICATIONS**

- Test Lab
- Sub-assemblies
- System Integration

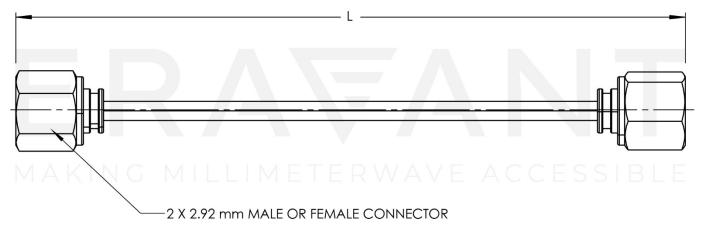
## SUPPLEMENTAL DETAILS



# 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: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

# ERAFANT

MAKING MILLIMETERWAVE ACCESSIBLE

# ERAFANT

MAKING MILLIMETERWAVE ACCESSIBLE