

2.92 mm (M) to 2.92 mm (M) Coaxial Cable, Semi-Rigid, 12", Phase Matched

Description:

Model SCW-KMKM012-S1-PM is a 12" long, semi-rigid, phase matched coaxial cable with 2.92 (K) mm male connectors that cover the frequency range of DC to 40 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.

**Features:**

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

Applications:

- Test Lab
- Sub-assemblies
- System Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	DC		40 GHz
Insertion Loss @ 18 GHz		1.3 dB	
Insertion Loss @ 26.5 GHz		1.6 dB	
Insertion Loss @ 32 GHz		1.8 dB	
Insertion Loss @ 40 GHz		2.0 dB	
Return Loss @ 40 GHz		18 dB	
Impedance		50 Ω	
Phase Match (Unit to Unit)		$\pm 10^\circ$	
Breakdown Voltage			500 V
Radiation Shielding		120 dB	
Velocity Factor		70%	
Power Handling @ 40 GHz			20 W (CW)
Specification Temperature		+25 $^\circ\text{C}$	
Operating Temperature	-40 $^\circ\text{C}$		+85 $^\circ\text{C}$

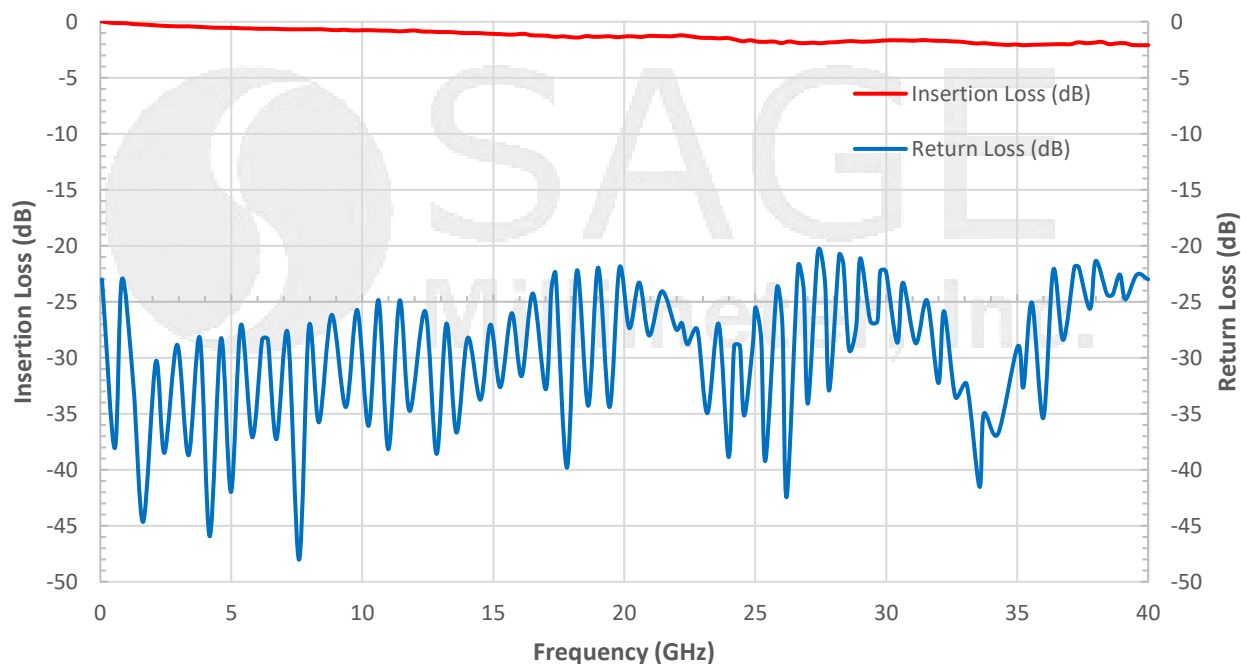
Mechanical Specifications:

Item	Specification
Minimum Bending Radius	0.126"
Connectors	2.92 (K) mm Male
Connector Material	Passivated Stainless Steel
Cable Conductor	Brass, Gold Plated
Cable Insulators	PEEK/PEI
Cable Outer Diameter	0.087"
Length	12"
Weight	0.5 Oz
Outline	CW-KK-S8

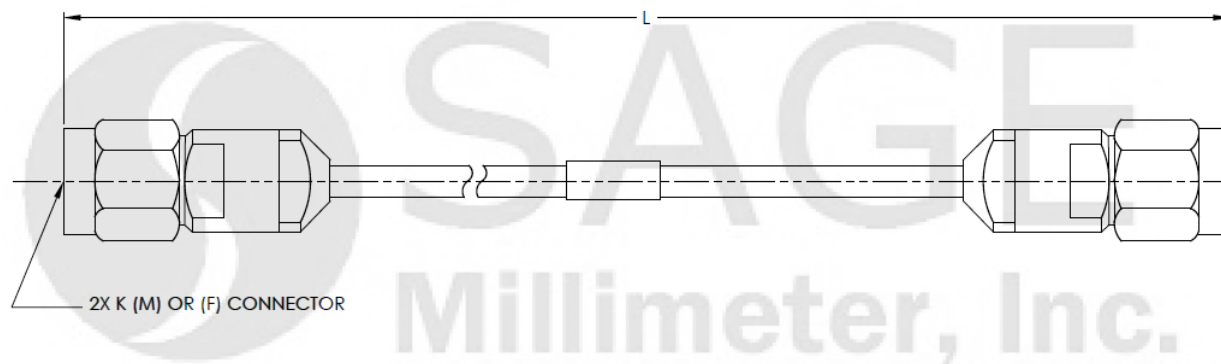


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Typical Performance vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- Length "L" can be customizable.
- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. 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, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-U3, is highly recommended.**



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