

2.92 mm (M) to 2.92 mm (M) Coaxial Cable, Flexible, Armored, Phase Stable, 48"

**STQ-CW-KMKM048-F2-PS-2** is a 48" long, flexible, phase stable, armored coaxial cable with 2.92 mm male connectors that cover the frequency range of DC to 40 GHz. The typical amplitude and phase stabilities at 40 GHz are  $\pm$  0.08 dB and  $\pm$  6° at a bending radius of 2.25", respectively. The coaxial cable utilizes the highest quality test instrumentation grade cable 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		< 2.6 dB	
Insertion Loss @ 26.5 GHz		< 3.1 dB	
Insertion Loss @ 32 GHz		< 3.6 dB	
Insertion Loss @ 40 GHz		< 4.0 dB	
Return Loss @ 40 GHz		19 dB	
Phase Stability*		± 6°	
Amplitude Stability*		$\pm0.08~\text{dB}$	
Impedance		50 $\Omega$	
Radiation Shielding	90 dB	100 dB	
Power Handling @ 40 GHz			20 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

\*When cable is wrapped 360° around a 2.25" (57 mm) radius mandrel.

ECCN

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### **FEATURES**

- · High Performance
- Phase Stable
- Armored
- Flexible
- Stable and Reliable

### **APPLICATIONS**

- Test Lab
- VNA
- Microwave Anechoic Chambers
- Antenna Ranges

#### SUPPLEMENTAL DETAILS

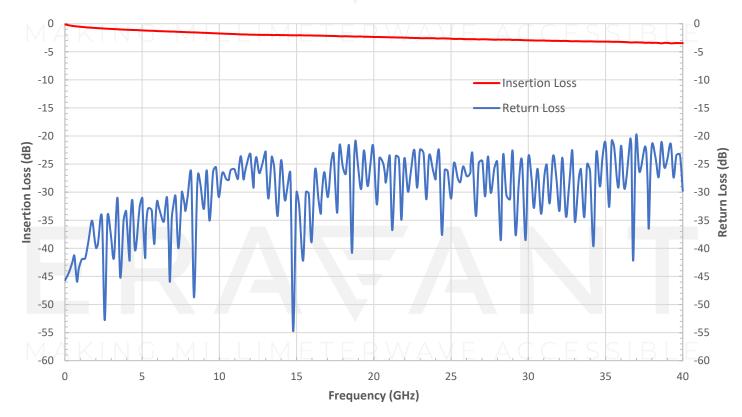




## **Mechanical Specifications:**

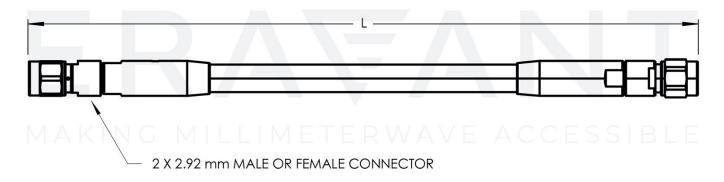
Item	Specification
Connectors	2.92 mm Male
Connector Contact Material	Be-Cu / Gold Plating per MIL-G-45204
Connector Material	Passivated Stainless Steel
Connector Dielectric	PEI
Cable Dielectric	ePTFE
Inner / Outer Cable Jacket Material	FEP / Stainless Steel Braid and PTFE
Cable Outer Diameter	0.240"
Length	48"
Minimum Bending Radius	1.25"
Outline	CW-KK-F10-A-V

# **Typical Performance vs. Frequency**





**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



### NOTE:

LENGTH "L" IS CUSTOMIZABLE

MAKING MILLIMETERWAVE ACCESSIBLE

### 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.

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