

1.85 mm (M) to 1.85 mm (M) Coaxial Cable, Flexible, Armored, Phase Stable, 36"

**STQ-CW-VMVM036-F2-PS** is a 36" long, flexible, phase stable, armored coaxial cable with 1.85 mm (V) male connectors that cover the frequency range of DC to 67 GHz. The typical amplitude and phase stabilities at 67 GHz are  $\pm$  0.08 dB and  $\pm$  8° 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		67 GHz
Insertion Loss @ 18 GHz		3.1 dB	
Insertion Loss @ 30 GHz		3.9 dB	
Insertion Loss @ 40 GHz		4.8 dB	
Insertion Loss @ 67 GHz		6.2 dB	
Return Loss @ 67 GHz		16 dB	
Phase Stability*		± 8°	
Amplitude Stability*		$\pm0.08~\text{dB}$	
Impedance		50 Ω	
Radiation Shielding	90 dB	100 dB	
Power Handling @ 67 GHz			8 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

\*When cable is wrapped  $360^{\circ}$  around a 2.25" (57 mm) radius mandrel.

ECCN EAR99

### **FEATURES**

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

### **APPLICATIONS**

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

#### SUPPLEMENTAL DETAILS

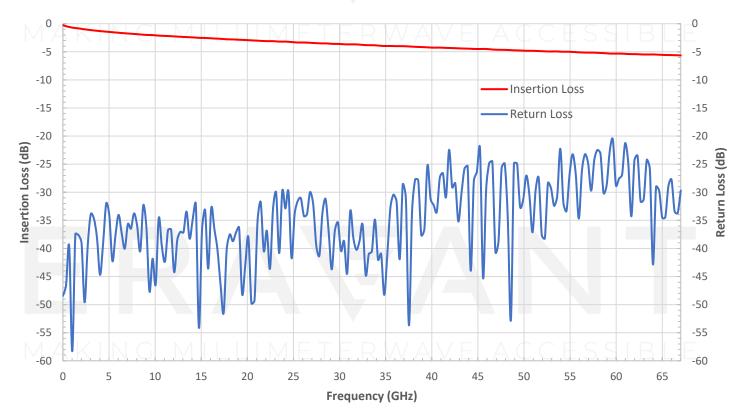




## **Mechanical Specifications:**

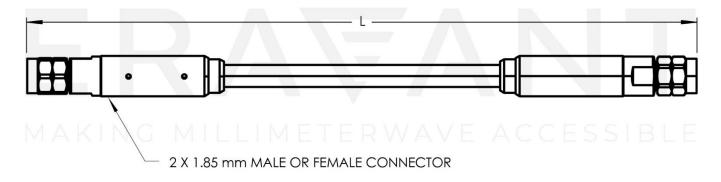
Item	Specification
Connectors	1.85 mm (V) Male
Connector Contact Material	Be-Cu / Gold Plating per MIL-G-45204
Connector Material	Passivated Stainless Steel
Connector Dielectric	PEI
Cable Dielectric	ePTFE
Inner / Outer Cable Jacket Material	FEP / Stainless Steel Braid and PTFE
Cable Outer Diameter	0.199"
Length	36"
Minimum Bending Radius	1.125"
Outline	CW-VV-F10-A-V

# **Typical Performance vs. Frequency**





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



### NOTE:

LENGTH "L" IS CUSTOMIZABLE

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### 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.
- Erayant 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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