

**1.0 mm (M) to 1.0 mm (M) VNA Test Cable, 20"**

**STQ-CW-1M1M020-S2** is a 20" long, instrumentation grade, armored coaxial cable with 1.0 mm male connectors that covers the frequency range of DC to 110 GHz. The cable is especially designed and manufactured for VNA applications. 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 connector type combinations and lengths are offered under different models.

**Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		110 GHz
Insertion Loss @ 110 GHz		7.2 dB	
Return Loss @ DC to 40 GHz		18 dB	
Return Loss @ 40 to 60 GHz	16 dB	17 dB	
Return Loss @ 60 to 110 GHz	16 dB	17 dB	
Phase Stability		$\pm 2^\circ$	
Amplitude Stability		$\pm 0.05$ dB	
Impedance		50 $\Omega$	
Specification Temperature		+25 $^\circ$ C	
Operating Temperature	-40 $^\circ$ C		+85 $^\circ$ C

**Mechanical Specifications:**

Item	Specification
Connectors 1	1.0 mm Male
Connectors 2	1.0 mm Male
Minimum One-Time Bending Radius	1"
Connector Contact Material	BeCu, Gold Plating per MIL-G-45204
Connector Material	Passivated Stainless Steel
Cable Dielectric	LD PTFE
Outer Cable Jacket Material	Stainless Steel Braid and PTFE
Cable Outer Diameter	0.185"
Length	20"
Outline	CW-11-S10-V

**ECCN**

EAR99

**FEATURES**

- High Performance
- Armored
- Stable and Reliable

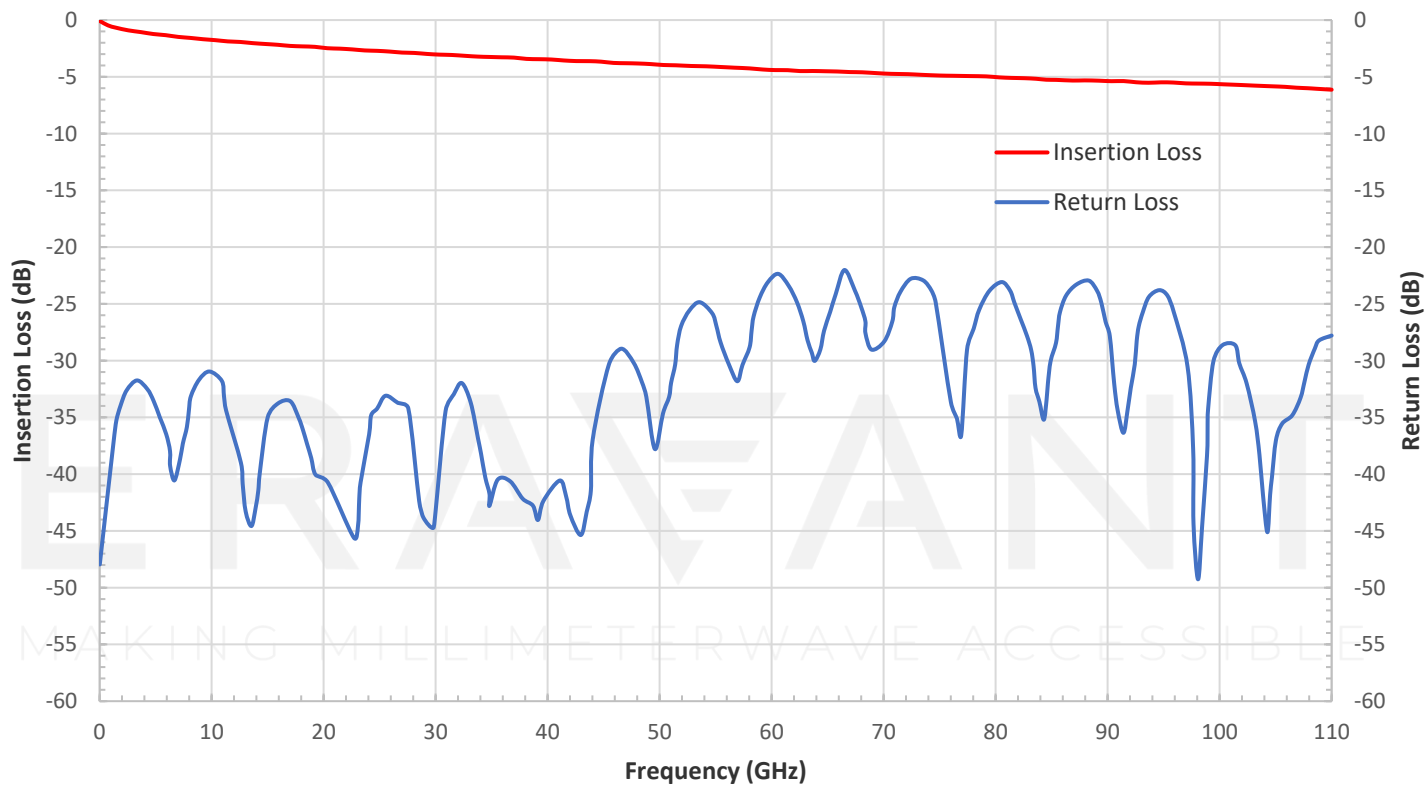
**APPLICATIONS**

- Test Lab
- VNA

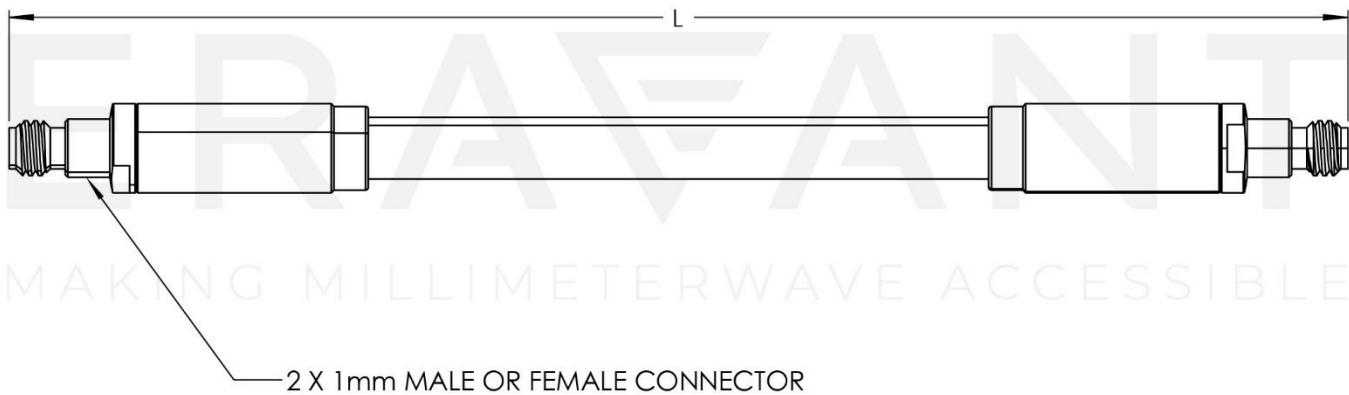
**SUPPLEMENTAL DETAILS**

STQ-CW-1M1M020-S2

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:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm). Torque wrench model SCH-06004-S1 is highly recommended.

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