

## STQ-CW-2M2M048-F2-PS-2

### 2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Flexible, Armored, Phase Stable, 48"

**STQ-CW-2M2M048-F2-PS-2** is a 48" long, flexible, phase stable, armored coaxial cable with 2.4 mm male connectors that cover the frequency range of DC to 50 GHz. The typical amplitude and phase stabilities at 50 GHz are  $\pm 0.08$  dB and  $\pm 8^\circ$  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		50 GHz
Insertion Loss @ 18 GHz		< 3.9 dB	
Insertion Loss @ 26.5 GHz		< 5.0 dB	
Insertion Loss @ 40 GHz		< 6.1 dB	
Insertion Loss @ 50 GHz		< 6.9 dB	
Return Loss @ 50 GHz		17.7 dB	
Phase Stability*		$\pm 8^\circ$	
Amplitude Stability*		$\pm 0.08$ dB	
Impedance		50 $\Omega$	
Radiation Shielding	90 dB	100 dB	
Power Handling @ 50 GHz			15 W (CW)
Specification Temperature		+25 $^\circ$ C	
Operating Temperature	-40 $^\circ$ C		+85 $^\circ$ C

\*When cable is wrapped 360° 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

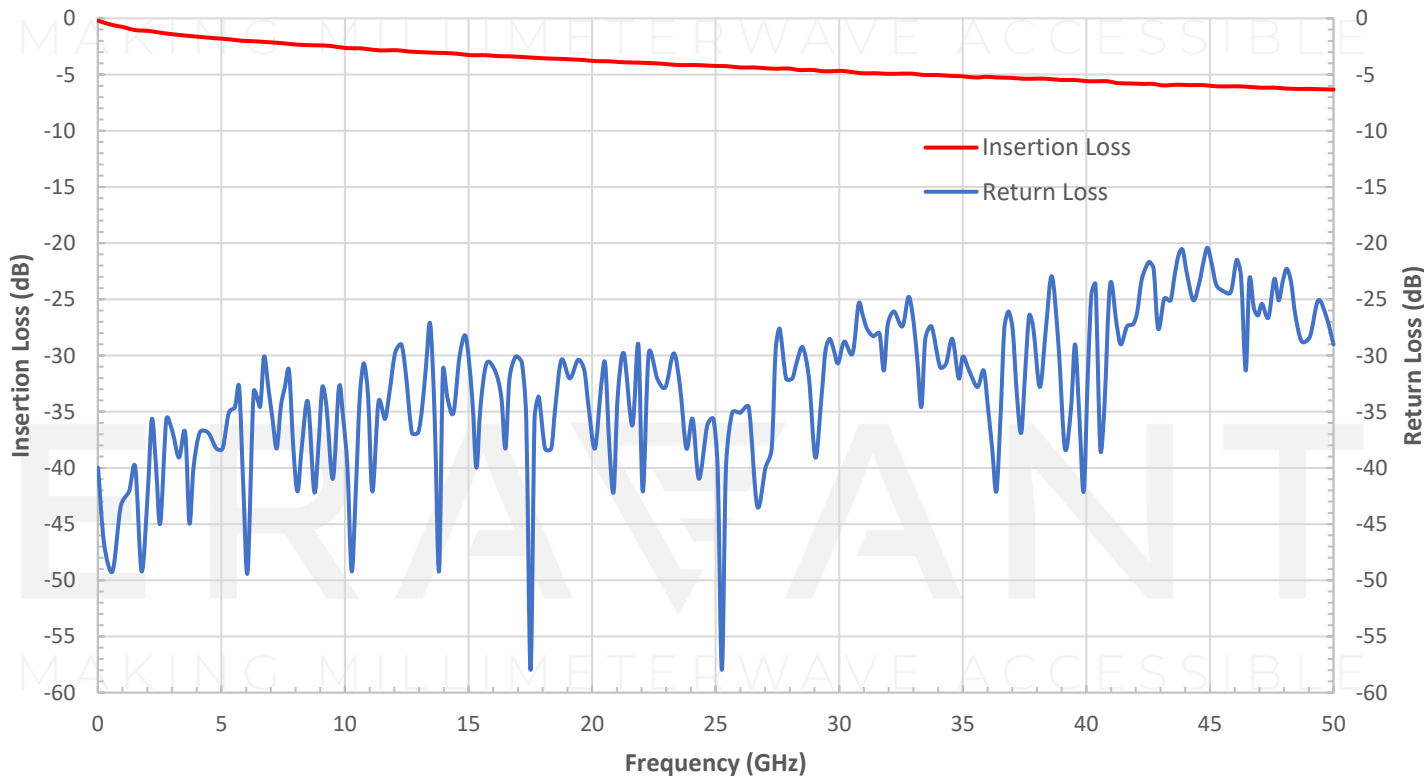


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Mechanical Specifications:

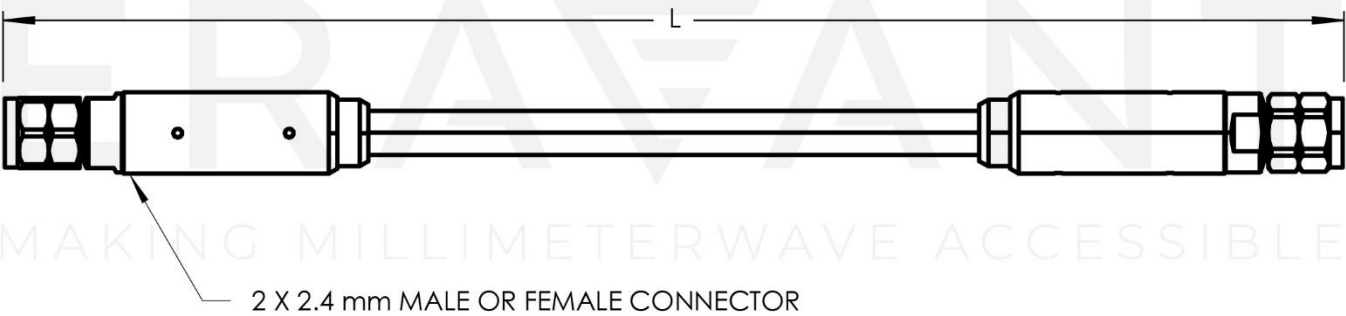
Item	Specification
Connectors	2.4 mm Male
Connector Contact Material	Be-Cu / Gold Plating per MIL-G-45204
Connector Material	Passivated Stainless Steel
Connector Dielectric	PEI
Cable Dielectric	ePTFE
Inner / Outer Cable Jacket Material	FEP / Stainless Steel Braid and PTFE
Cable Outer Diameter	0.199"
Length	48"
Minimum Bending Radius	1.125"
Outline	CW-22-F10-A-V

Typical Performance vs. Frequency



STQ-CW-2M2M048-F2-PS-2

**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:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model [SCH-08008-S1](#) is highly recommended.