

2.4 mm (M) to 2.4 mm (M) Coaxial Cable, Flexible, Armored, Phase Stable, 24"

STQ-CW-2M2M024-F2-PS is a 24" 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 0.05 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		50 GHz
Insertion Loss @ 18 GHz		1.7 dB	
Insertion Loss @ 26.5 GHz		2.2 dB	
Insertion Loss @ 40 GHz		2.7 dB	
Insertion Loss @ 50 GHz		3.0 dB	
Return Loss		17.7 dB	
Phase Stability*		± 6°	
Amplitude Stability*		$\pm~0.05~\text{dB}$	
Impedance		50 Ω	
Radiation Shielding		100 dB	
Specification Temperature		+25 °C	
Operating Temperature	-55 °C		+125 °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

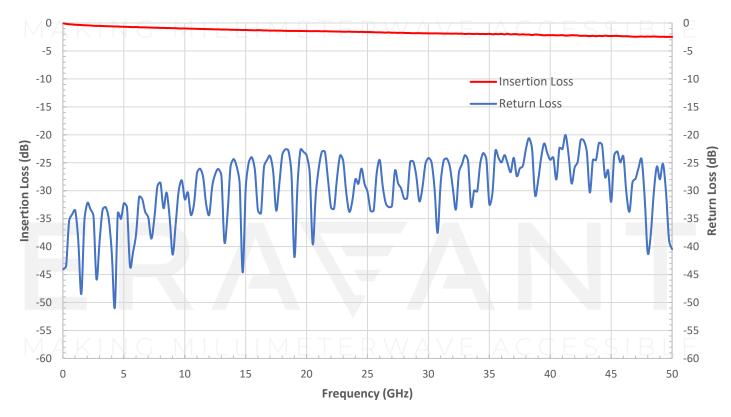




Mechanical Specifications:

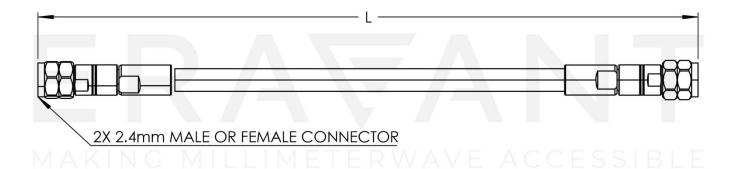
Item	Specification
Connectors	2.4 mm Male
Connector Contact Material	Be-Cu / Gold Plating per MIL-G-45204
Connector Material	Passivated Stainless Steel
Connector Dielectric	PEI
Cable Dielectric	ePTFE
Inner / Outer Cable Jacket Material	Braided Strength Member / Braided Jacket
Cable Outer Diameter	0.210"
Length	24"
Minimum Bending Radius	1.0"
Outline	CW-22-F10-A-PS

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.
- 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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