STQ-CW-3M3M048-F2-PS

3.5 mm (M) to 3.5 mm (M) Coaxial Cable, Flexible, Armored, Phase Stable, 48”

STQ-CW-3M3M048-F2-PS is a 48” long, flexible, phase stable, armored coaxial cable with 3.5 male connectors that cover the frequency range of DC to 26.5 GHz. The typical amplitude and phase stabilities at 26.5 GHz are ± 0.08 dB and ± 5° 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		26.5 GHz
Insertion Loss @ 3 GHz		< 1.2 dB	
Insertion Loss @ 6 GHz		< 1.6 dB	
Insertion Loss @ 12 GHz		< 2.2 dB	
Insertion Loss @ 18 GHz		< 2.6 dB	
Insertion Loss @ 26.5 GHz		< 3.1 dB	
Return Loss @ 26.5 GHz		19 dB	
Phase Stability*		± 5°	
Amplitude Stability*		± 0.08 dB	
Impedance		50 Ω	
Radiation Shielding	90 dB	100 dB	
Power Handling @ 26.5 GHz			105 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.

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FEATURES

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

APPLICATIONS

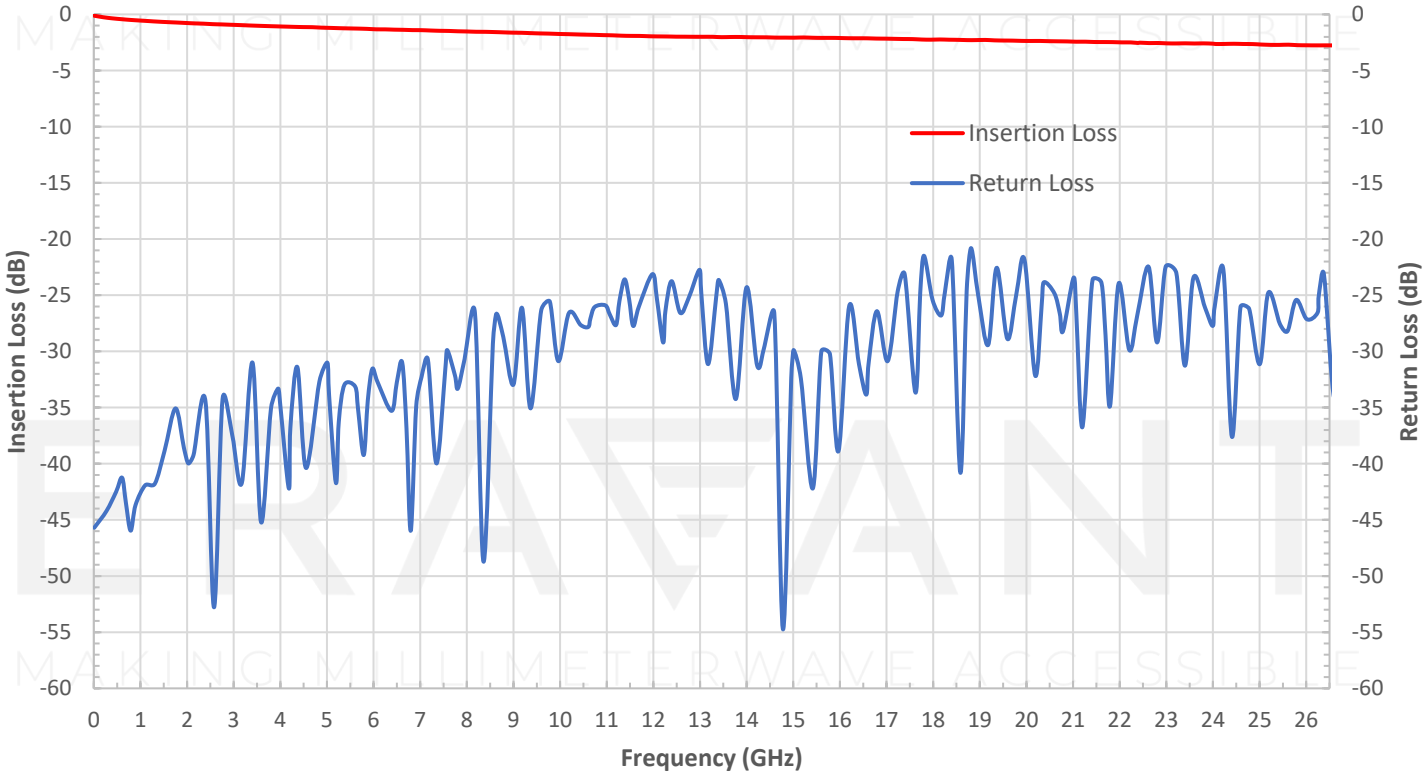
- Test Lab
- VNA
- Microwave Anechoic Chambers
- Antenna Ranges

SUPPLEMENTAL DETAILS

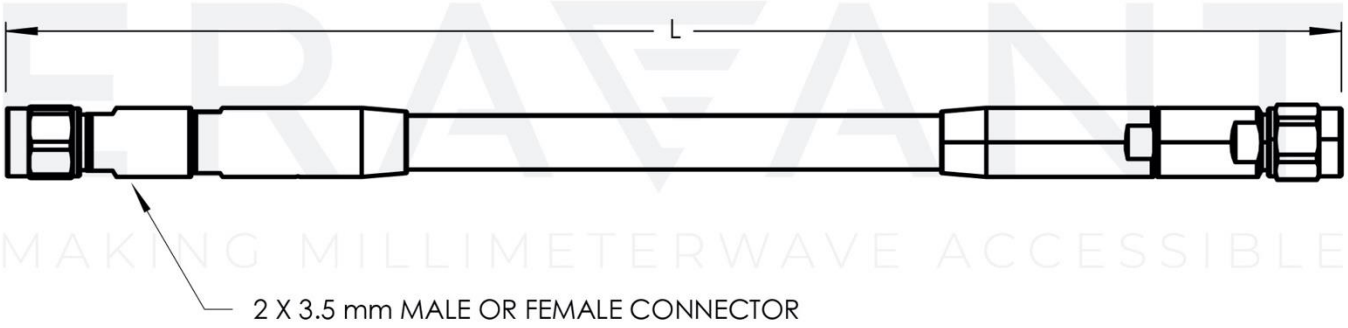
Mechanical Specifications:

Item	Specification
Connectors	3.5 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-33-F10-A-V

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: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.