

STQ-CW-SMSM048-F2-PS

SMA (M) to SMA (M) Coaxial Cable, Flexible, Armored, Phase Stable, 48"

STQ-CW-SMSM048-F2-PS is a 48" long, flexible, phase stable, armored coaxial cable with SMA male connectors that cover the frequency range of DC to 18 GHz. The typical amplitude and phase stabilities at 18 GHz are ± 0.05 dB and $\pm 3^\circ$ 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 | | 18 GHz |
| Insertion Loss @ 3 GHz | | 1.3 dB | |
| Insertion Loss @ 6 GHz | | 1.7 dB | |
| Insertion Loss @ 12 GHz | | 2.4 dB | |
| Insertion Loss @ 18 GHz | | 3.0 dB | |
| Return Loss | | 19 dB | |
| Phase Stability* | | $\pm 3^\circ$ | |
| Amplitude Stability* | | ± 0.05 dB | |
| Impedance | | 50 Ω | |
| Radiation Shielding | | 100 dB | |
| Specification Temperature | | +25 $^\circ\text{C}$ | |
| Operating Temperature | -55 $^\circ\text{C}$ | | +125 $^\circ\text{C}$ |

*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

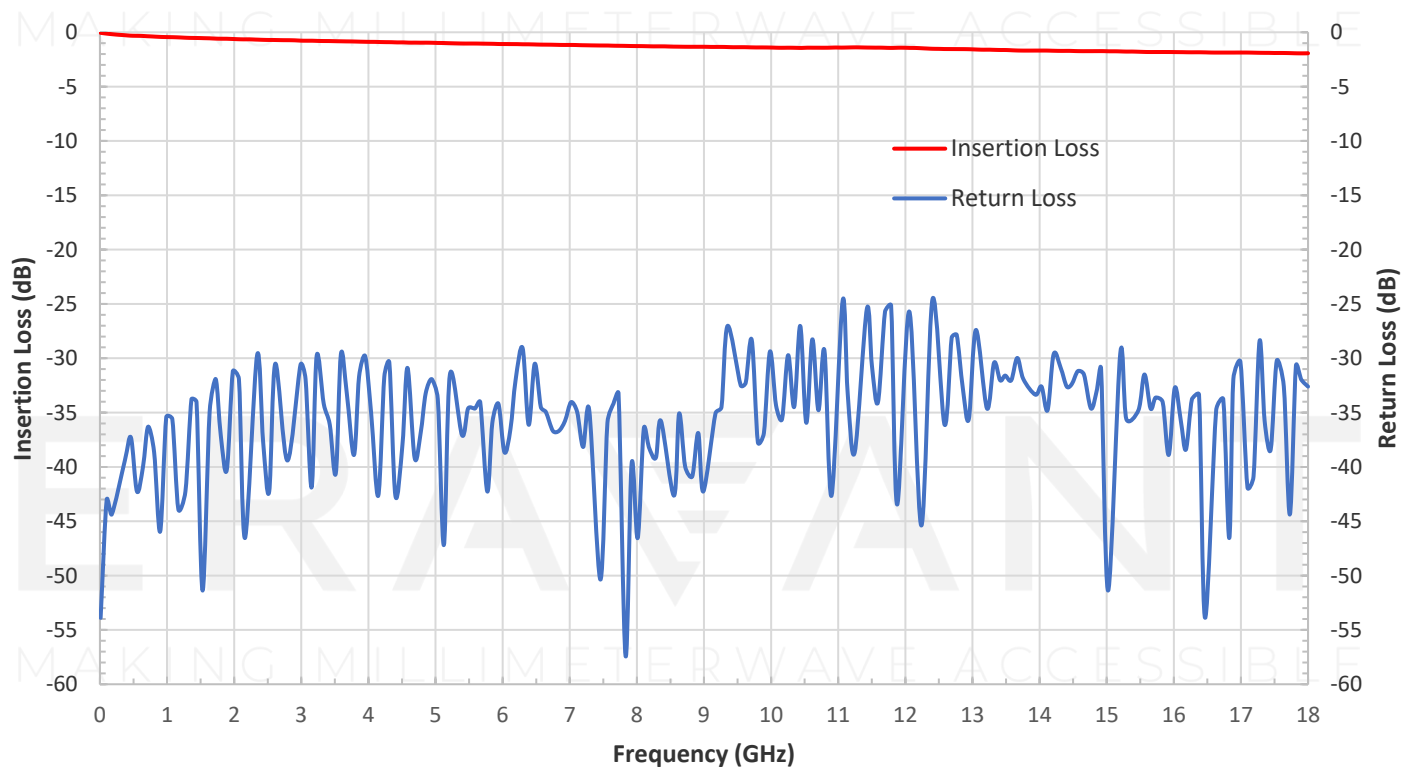


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Mechanical Specifications:

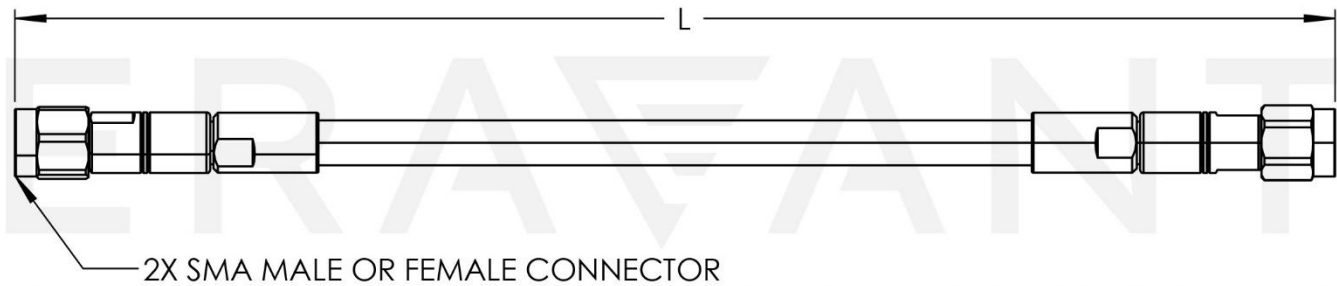
| Item | Specification |
|-------------------------------------|--|
| Connectors | SMA Male |
| Connector Contact Material | Brass / Gold Plating per MIL-G-45204 |
| Connector Material | Passivated Stainless Steel |
| Connector Dielectric | PTFE |
| Cable Dielectric | ePTFE |
| Inner / Outer Cable Jacket Material | Braided Strength Member / Braided Jacket |
| Cable Outer Diameter | 0.210" |
| Length | 48" |
| Minimum Bending Radius | 1.0" |
| Outline | CW-SS-F10-A-PS |

Typical Performance vs. Frequency



STQ-CW-SMSM048-F2-PS

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.