

## SCW-3M3M100-F2-A-V

### 3.5 mm (M) to 3.5 mm (M) Coaxial Cable, Flexible, Armored, Thermal Vacuum Safe, 100"

**SCW-3M3M100-F2-A-V** is a 100" long, flexible, thermal vacuum safe, armored coaxial cable with 3.5 mm male connectors that cover the frequency range of DC to 26.5 GHz. 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		< 2.2 dB	
Insertion Loss @ 6 GHz		< 3.0 dB	
Insertion Loss @ 12 GHz		< 4.2 dB	
Insertion Loss @ 18 GHz		< 5.0 dB	
Insertion Loss @ 26.5 GHz		< 6.2 dB	
Return Loss @ 26.5 GHz		19 dB	
Impedance		50 $\Omega$	
Breakdown Voltage			1000 Volts
Radiation Shielding	90 dB	100 dB	
Power Handling @ 26.5 GHz			105 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

#### 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	100"
Minimum Bending Radius	1.25"
Outline	CW-33-F10-A-V

#### ECCN

EAR99

#### FEATURES

- High Return Loss
- Low Insertion Loss
- Armored
- Flexible and Durable
- Thermal Vacuum Safe

#### APPLICATIONS

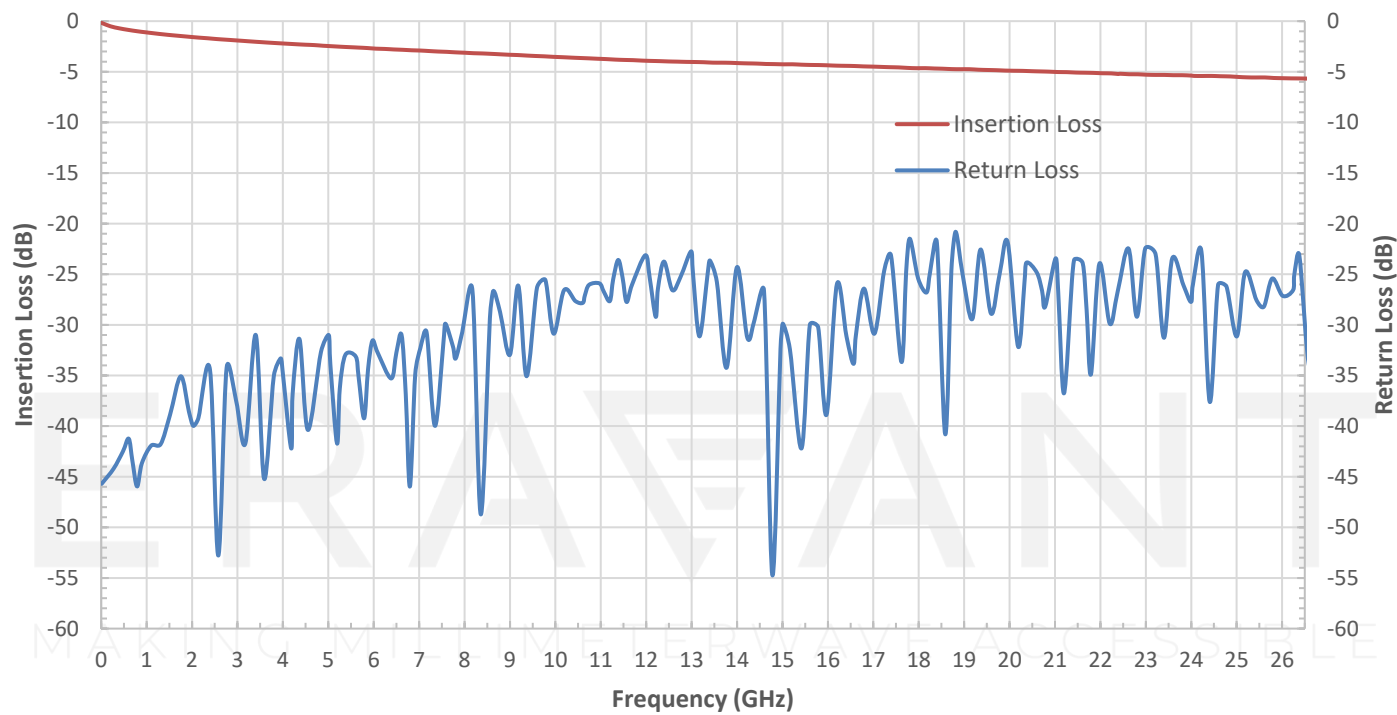
- Test Lab
- Sub-assemblies
- Thermal Vacuum Chamber

#### SUPPLEMENTAL DETAILS

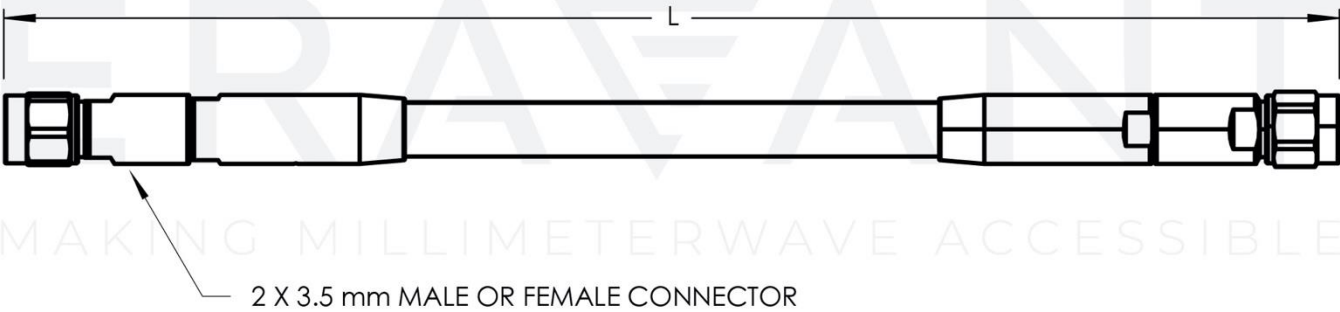


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Typical Performance vs. Frequency



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



**NOTE:**

LENGTH "L" IS CUSTOMIZABLE

## SCW-3M3M100-F2-A-V

**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.

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