

## SMA (M) to SMA (M) Coaxial Cable, Flexible, Lab Grade, 6", Phase Matched

### Description:

**Model SCW-SMSM006-F1-PM** is a 6" long, flexible, phase matched lab grade coaxial cable with SMA male connectors that cover the frequency range of DC to 26.5 GHz. The coaxial cable utilizes high performance material 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.



### Features:

- High Return Loss
- Low Insertion Loss
- Flexible and Durable

### Applications:

- Test Lab
- Sub-assemblies

### Electrical Specifications:

| Parameter                  | Minimum              | Typical              | Maximum              |
|----------------------------|----------------------|----------------------|----------------------|
| Frequency                  | DC                   |                      | 26.5 GHz             |
| Insertion Loss @ 3 GHz     |                      | < 0.2 dB             |                      |
| Insertion Loss @ 6 GHz     |                      | < 0.3 dB             |                      |
| Insertion Loss @ 12 GHz    |                      | < 0.4 dB             |                      |
| Insertion Loss @ 18 GHz    |                      | < 0.5 dB             |                      |
| Insertion Loss @ 26.5 GHz  |                      | < 0.6 dB             |                      |
| Return Loss @ 26.5 GHz     |                      | 20 dB                |                      |
| Impedance                  |                      | 50 $\Omega$          |                      |
| Phase Match (Unit to Unit) |                      | $\pm 10^\circ$       |                      |
| Breakdown Voltage          |                      |                      | 1000 Volts           |
| Radiation Shielding        |                      | 90 dB                |                      |
| Power Handling @ 26.5 GHz  |                      |                      | 105 W (CW)           |
| Specification Temperature  |                      | +25 $^\circ\text{C}$ |                      |
| Operating Temperature      | -40 $^\circ\text{C}$ |                      | +85 $^\circ\text{C}$ |

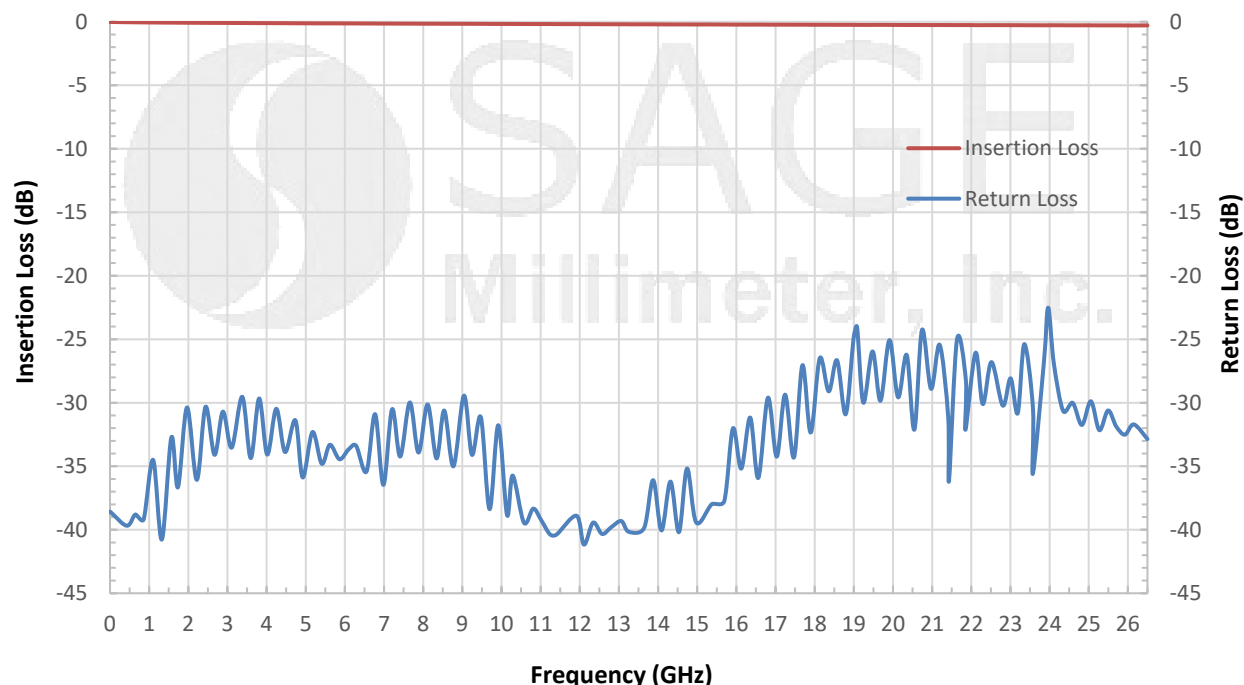
### Mechanical Specifications:

| Item                                        | Specification                      |
|---------------------------------------------|------------------------------------|
| Connectors                                  | SMA Male                           |
| Connector Contact Material/Plating          | Brass/Gold Plating Per MIL-G-45204 |
| Connector / Cable Insulation Layer Material | Passivated Stainless Steel / PTFE  |
| Cable Jacket Material                       | FEP                                |
| Cable Outer Diameter                        | 0.181"                             |
| Length                                      | 6"                                 |
| Minimum Bending Radius                      | 0.79"                              |
| Weight                                      | 0.7 Oz                             |
| Outline                                     | CW-SS-F8                           |

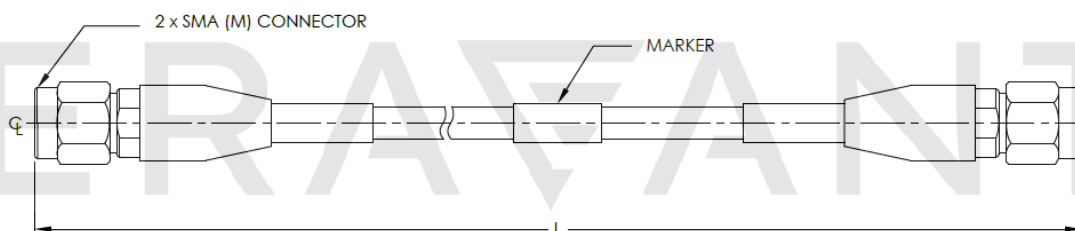


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### Typical Insertion Loss & Return Loss vs. Frequency



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



#### Note:

- Length "L" can be customizable.
- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was 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,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**



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