SMA (M) to SMA (M) Coaxial Cable, Semi-Rigid, 12"

SCW-SMSM012-S2 is a 12" long, semi-rigid 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.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		26.5 GHz
Insertion Loss @ 3 GHz		0.5 dB	
Insertion Loss @ 6 GHz		0.7 dB	
Insertion Loss @ 12 GHz		0.9 dB	
Insertion Loss @ 18 GHz		1.1 dB	
Insertion Loss @ 26.5 GHz		1.3 dB	
Return Loss @ 26.5 GHz		19 dB	
Impedance		50 Ω	
Breakdown Voltage		1500 VRMS	2500 VRMS
Radiation Shielding		120 dB	
Velocity Factor		76.5%	
Power Handling @ 26.5 GHz			30 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Minimum Bending Radius	0.25"
Connectors	SMA Male
Connector Material	Passivated Stainless Steel
Cable Conductor	Copper, Tin Plated
Cable Dielectric	LD PTFE
Cable Outer Diameter	0.0865"
Length	12"
Outline	CW-SS-S10

1/3

ECCN

EAR99

FEATURES

- High Return Loss
- Low Insertion Loss
- Semi-Rigid

APPLICATIONS

- Test Lab
- Sub-assemblies
- System Integration

SUPPLEMENTAL DETAILS



ERAWANT

SCW-SMSM012-S2

ERAVANT

0

-5

-10

-15

-20

-25

-30

-35

-40

-45

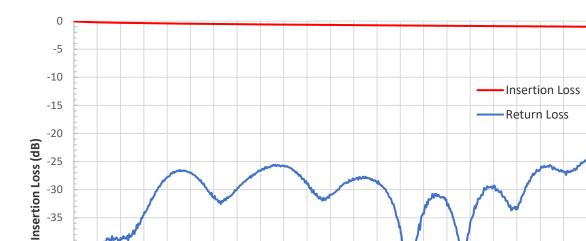
-50

-55

-60

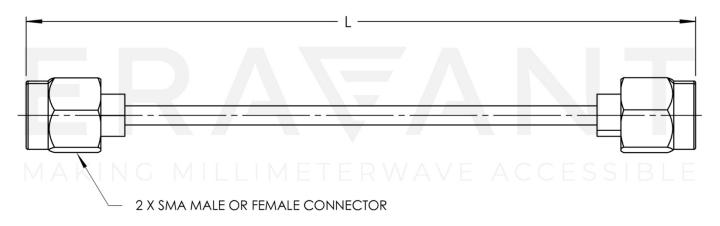
21 22 23 24 25 26

Return Loss (dB)



Typical Performance vs. Frequency

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



Frequency (GHz)

11 12 13 14 15 16 17 18 19 20

NOTE:

-35

-40

-45

-50

-55

-60

0 1 2 3 4 5 6 7 8 9 10

LENGTH "L" IS CUSTOMIZABLE

ERA₩ANT

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.

