



12-Way Coaxial Power Splitter, 2 to 18 GHz

Description:

Model SCS-0231832216-SFSF-121 is a coaxial 12-way power splitter with a typical insertion loss of 2.2 dB at each output port and a typical isolation of 18 dB across the frequency range of 2 to 18 GHz. The power splitter has a maximum power handling of 30 W (CW) and a maximum amplitude unbalance of ± 1 dB. The return loss for all ports is 14 dB typical. The RF connectors of the power splitter are equipped with SMA(F) connectors. Other interfaces are available under different models.



Features:

- High Isolation
- Compact Package

Applications:

- Test Lab
- Sub-assemblies
- Test Instrumentation

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	2.0 GHz		18.0 GHz
Insertion Loss*		2.2 dB	3.0 dB
Amplitude Unbalance		± 0.6 dB	± 1.0 dB
Phase Unbalance			8.0°
Port Isolation		18 dB	
Forward Power Handling			30 W (CW)
Reverse Power Handling			1.0 W (CW)
Impedance		50 Ohms	
Return Loss		14 dB	
Specification Temperature		+25 °C	
Operating Temperature	-55 °C		+85 °C

*Note: The insertion loss is circuit loss, which does not include the power dividing loss.

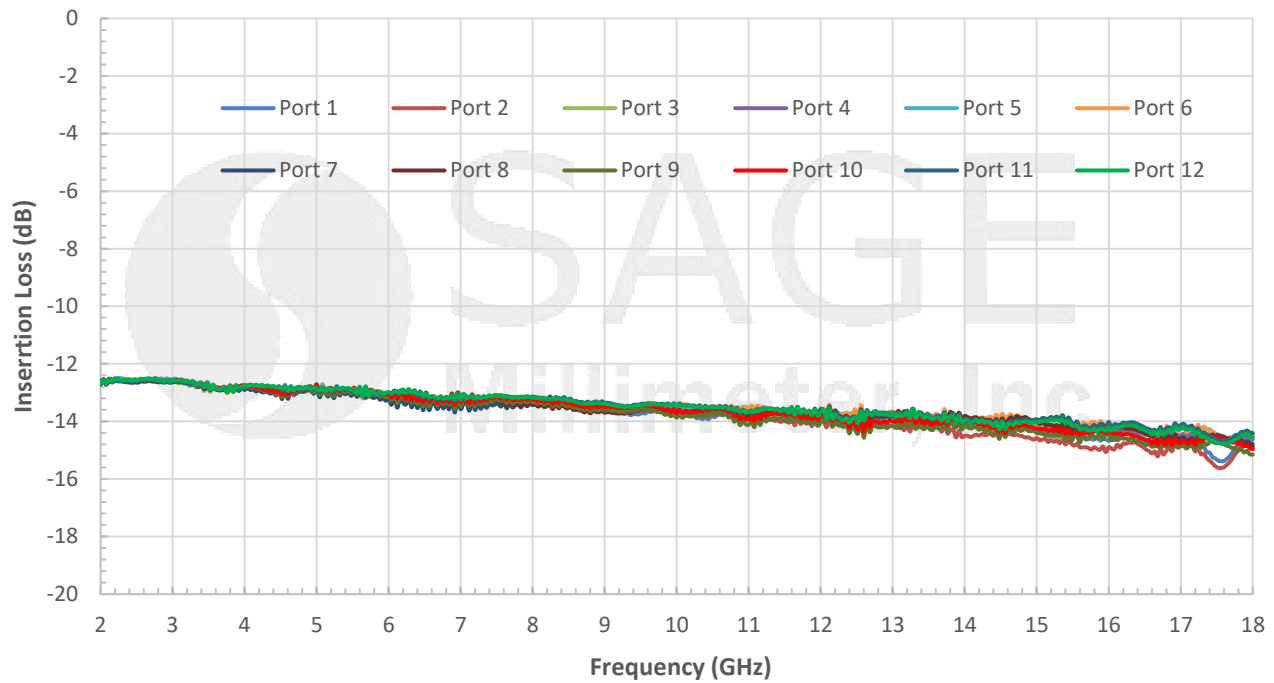
Mechanical Specifications:

Item	Parameter
RF Ports	SMA (F)
Case Material	Aluminum
Finish	Black Paint
Size	8.23" (L) x 0.50" (W) x 4.83" (H)
Outline	CS-612-R3

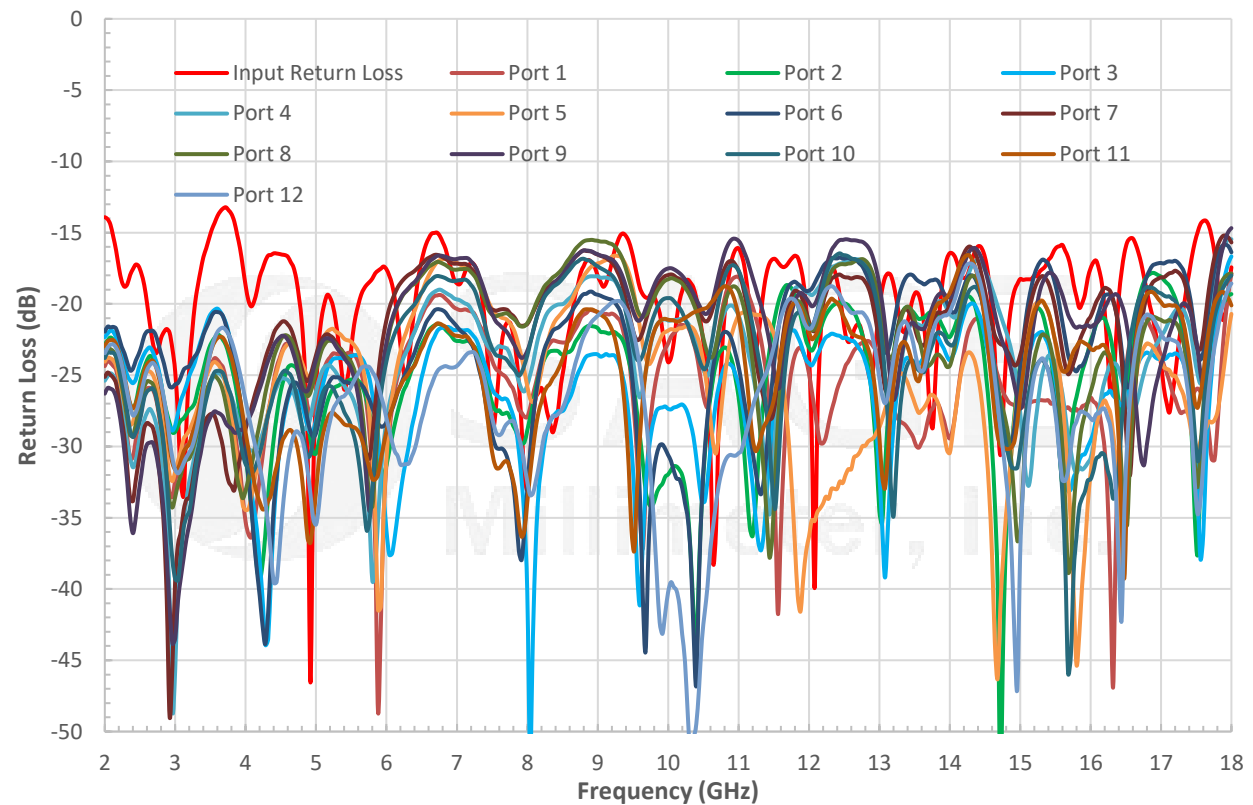


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Typical Insertion Loss vs. Frequency



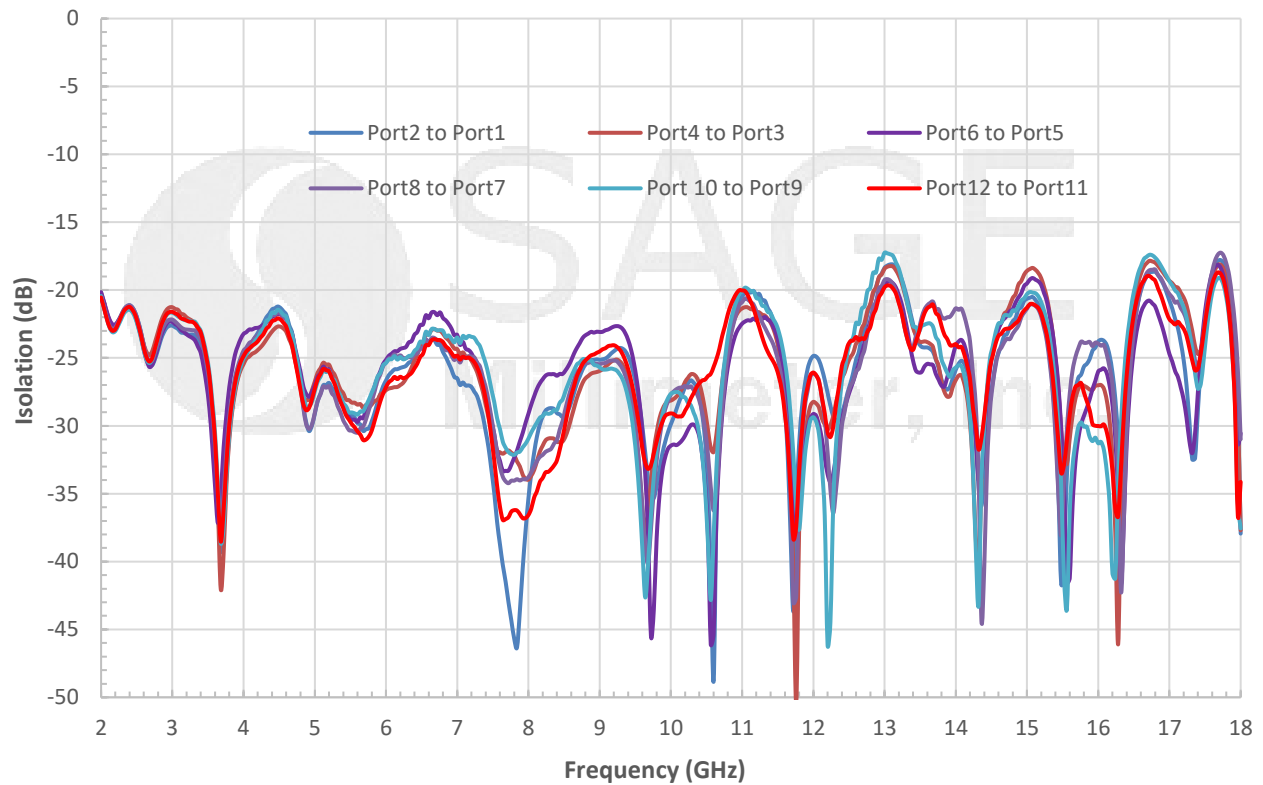
Typical Return Loss vs. Frequency



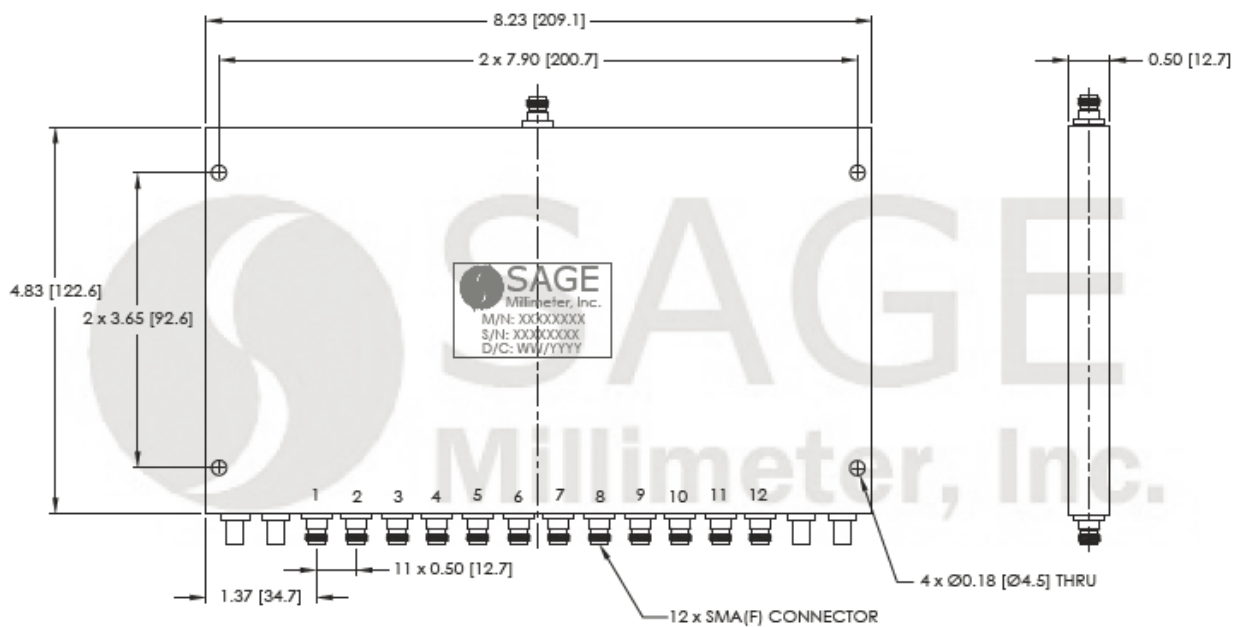


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Typical Isolation vs. Frequency



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



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Note:

- 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.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

