



Coaxial Directional Coupler, 6 to 18 GHz, 10 dB Coupling Level

Description:

SCD-0631831012-SF-SA is a 10 dB coaxial directional coupler that covers the frequency range of 6 to 18 GHz. The nominal insertion loss of the coupler is 1.0 dB and coupling ripple is ± 1.0 dB. The directivity of the coupler is 12 dB. The RF connectors of the coupler are SMA (F) connectors. The power handling of the coupler is 30 watts maximum. Other configurations, such as different connectors for input and output, are available under different model numbers.



Features:

- Low Insertion Loss
- Flat Coupling Level

Applications:

- Test Labs
- Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	6.0 GHz		18 GHz
Insertion Loss		1.0 dB	
Coupling		10 dB	
Coupling Flatness		± 1.0 dB	
Directivity		12 dB	
Port Return Loss		15 dB	
Impedance		50 Ω	
Power Handling			30 W (CW)
Specification Temperature		+25 $^{\circ}$ C	
Operating Temperature	-40 $^{\circ}$ C		+85 $^{\circ}$ C

Mechanical Specifications:

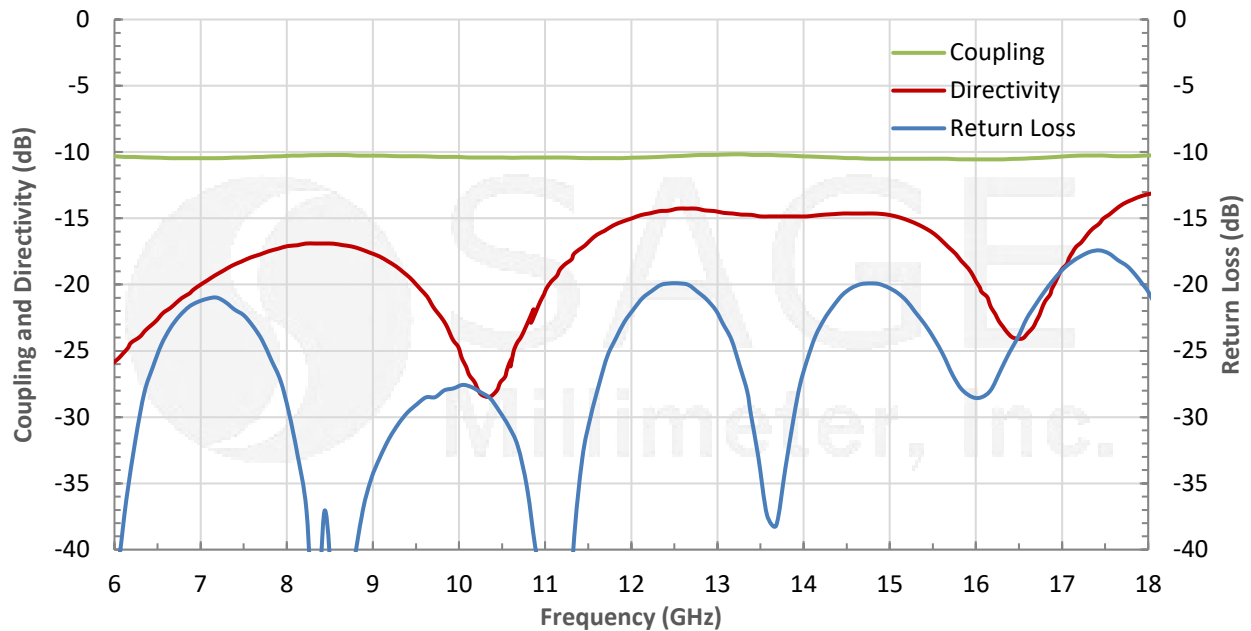
Item	Specification
RF Ports	SMA (F)
Case Material	Aluminum
Finishing	Black Painted
Weight	1.0 Oz
Size	1.3" (L) x 0.59" (W) x 0.43" (H)
Outline	CD-SS-SR4



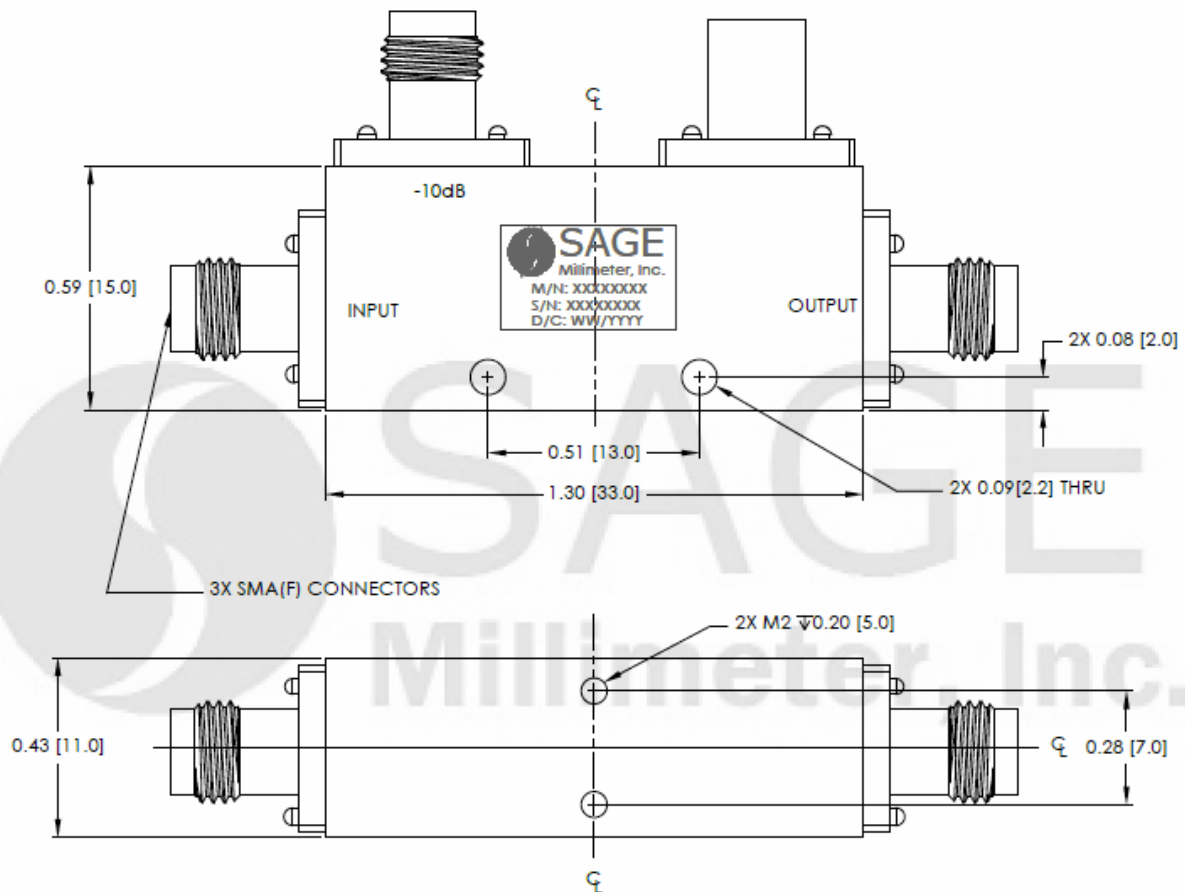


Coaxial Directional Coupler, 6 to 18 GHz, 10 dB Coupling Level

Typical Coupling and Directivity vs. Frequency



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



Coaxial Directional Coupler, 6 to 18 GHz, 10 dB Coupling Level

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.

Caution:

- Proper torque 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm) shall be used. **SAGE Millimeter torque wrench with model number SCH-08008-U3 is highly recommended.**

