SCD-1835032010-2F-SA

Rev 1.1

Coaxial Directional Coupler, 18 to 50 GHz, 20 dB Coupling Level

Description:

SCD-1835032010-2F-SA is a 20 dB coaxial directional coupler that covers the frequency range of 18 to 50 GHz. The nominal insertion loss of the coupler is 2.3 dB and the coupling ripple is ±1.2 dB. The directivity of the coupler is 10 dB. The RF connectors of the coupler are 2.4 mm female connectors. The power handling of the coupler is 50 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
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		50 GHz
Insertion Loss		2.3 dB	
Coupling		20 dB	
Coupling Flatness		± 1.2 dB	
Directivity		10 dB	
Port Return Loss		10 dB	
Impedance		50 Ω	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+80 °C

Mechanical Specifications:

Item	Specification
RF Ports	2.4 mm Female
Case Material	Aluminum
Finishing	Black Painted
Weight	0.9 Oz
Outline	CD-2S-SR2

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SAGE Millimeter, Inc.

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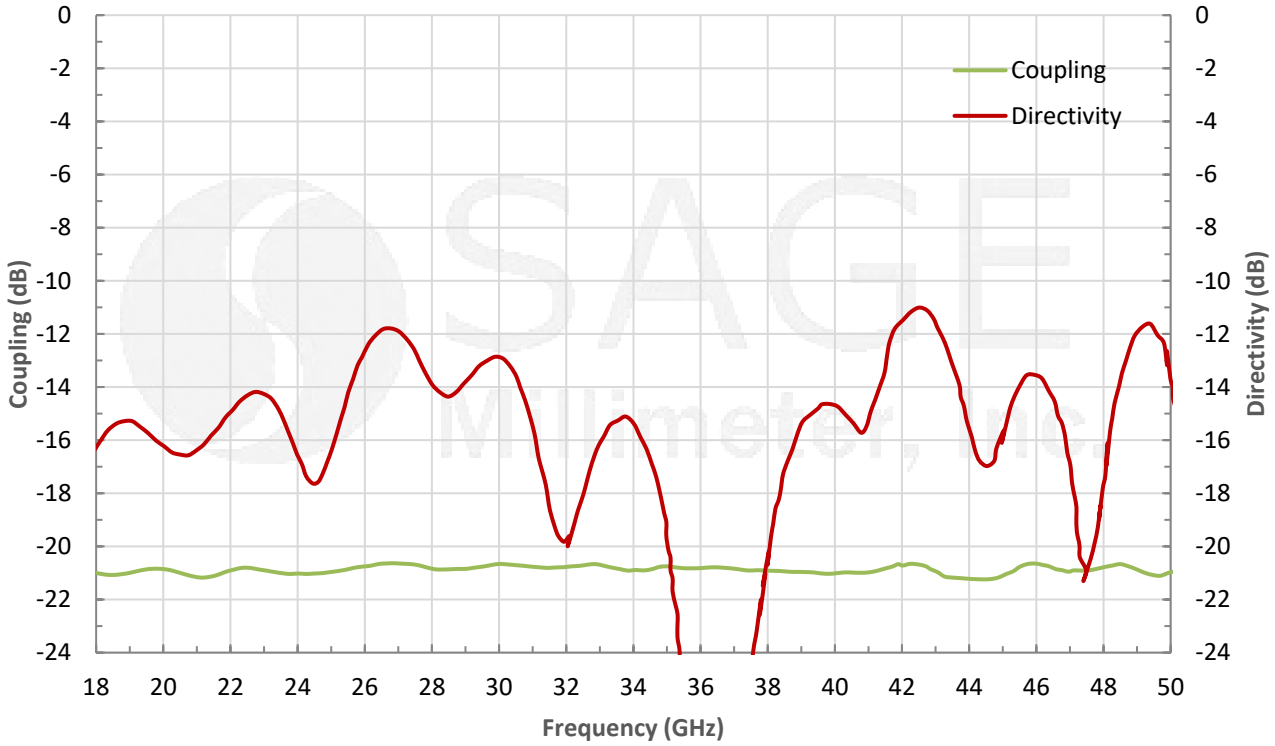
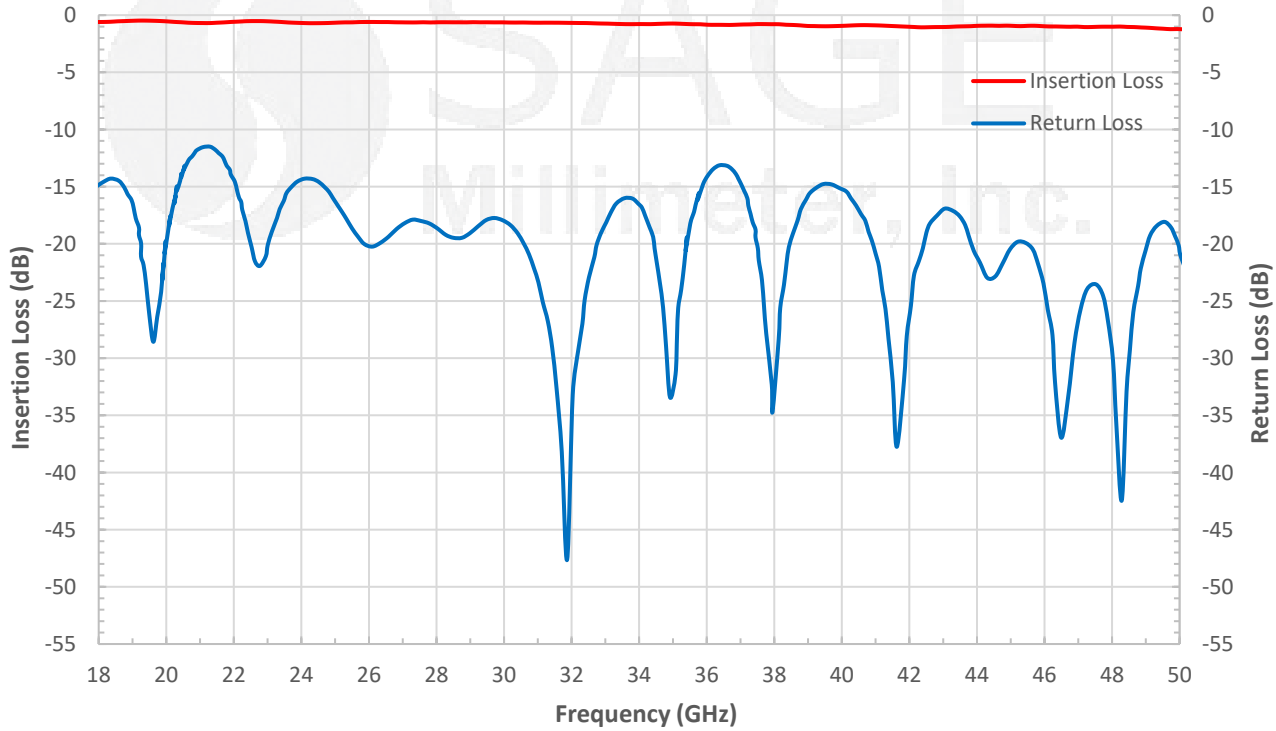
Typical Coupling and Directivity vs. Frequency



Typical Performance vs. Frequency



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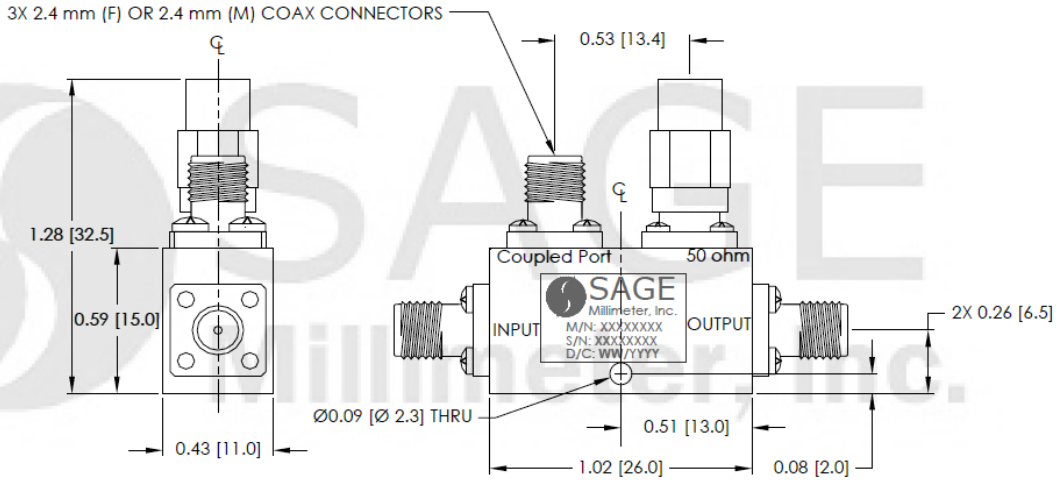
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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.
- Eravant 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. **Eravant torque wrench with model number SCH-08008-S1 is highly recommended.**