

SCS-0135032008-2F-SA

Coaxial Directional Coupler, 1 to 50 GHz, 10 dB Coupling Level

SCS-0135032008-2F-SA is a 10 dB coaxial directional coupler that covers the frequency range of 1 to 50 GHz. The nominal insertion loss of the coupler is 3.5 dB and the coupling ripple is ± 2.2 dB. The directivity of the coupler is 8 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.



Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|--------------|-----------|
| Frequency | 1 GHz | | 50 GHz |
| Insertion Loss | | 3.5 dB | |
| Coupling | | 10 dB | |
| Coupling Flatness | | ± 2.2 dB | |
| Directivity | | 8 dB | |
| Port Return Loss | | 10 dB | |
| Impedance | | 50 Ω | |
| Power Handling | | | 50 W (CW) |
| Specification Temperature | | +25°C | |
| Operating Temperature | -40°C | | +85°C |

Mechanical Specifications:

| Item | Specification |
|---------------|---------------|
| RF Ports | 2.4 mm Female |
| Case Material | Aluminum |
| Finish | Gold Plated |
| Weight | 1.7 Oz |
| Outline | CD-2S-SR5 |

ECCN

EAR99

FEATURES

- Low Insertion Loss
- Flat Coupling Level

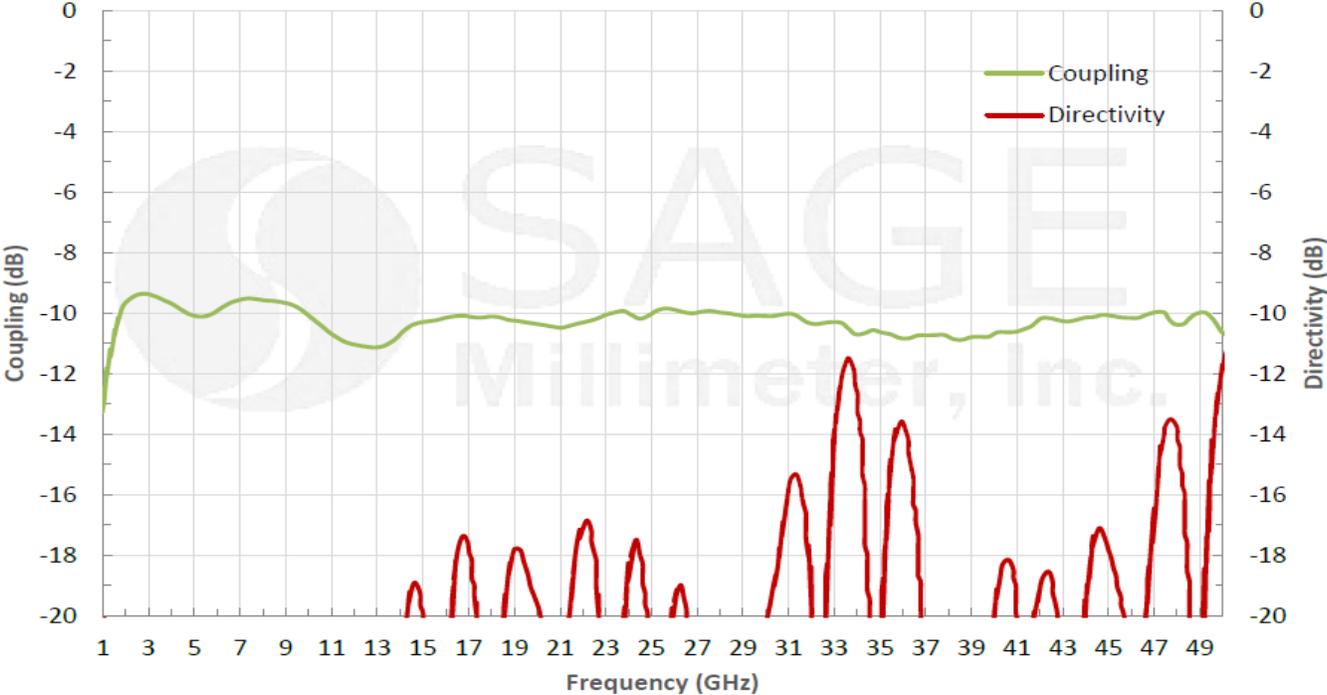
APPLICATIONS

- Test Lab
- Instrumentations
- Sub-assemblies

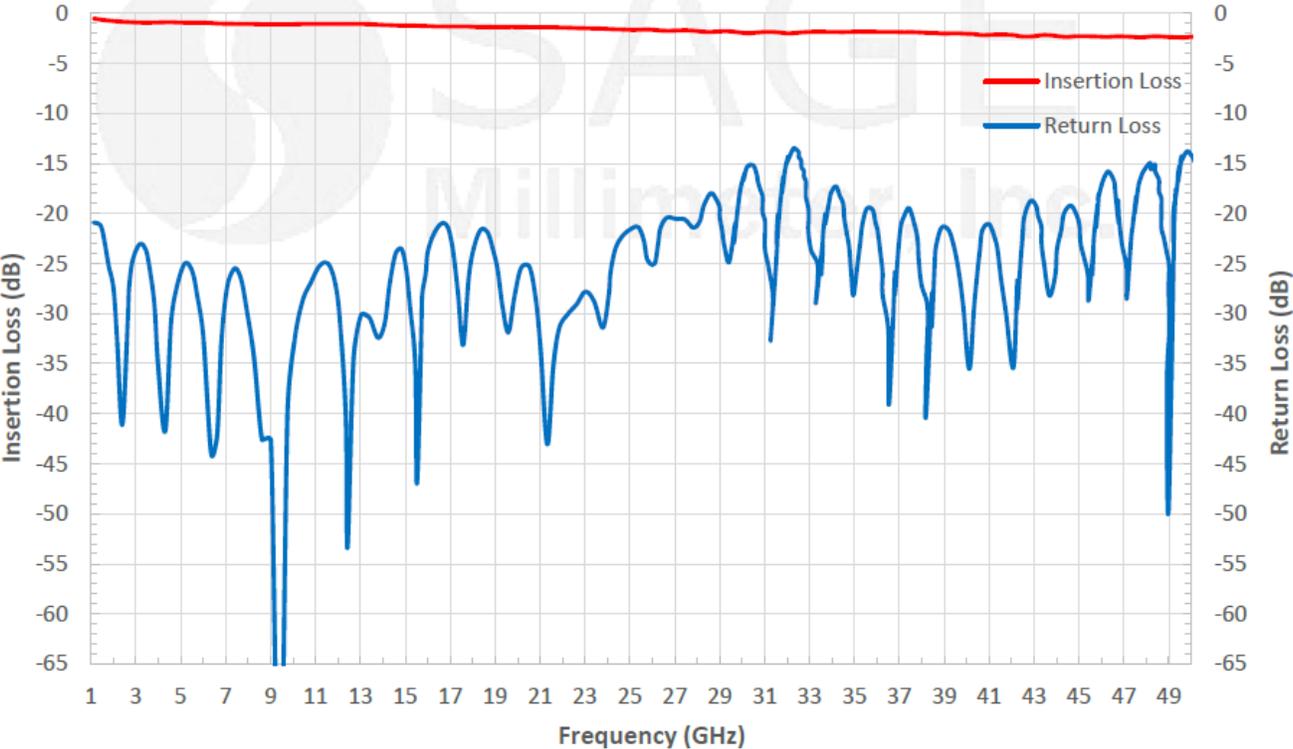
SUPPLEMENTAL DETAILS



Typical Coupling and Directivity vs. Frequency

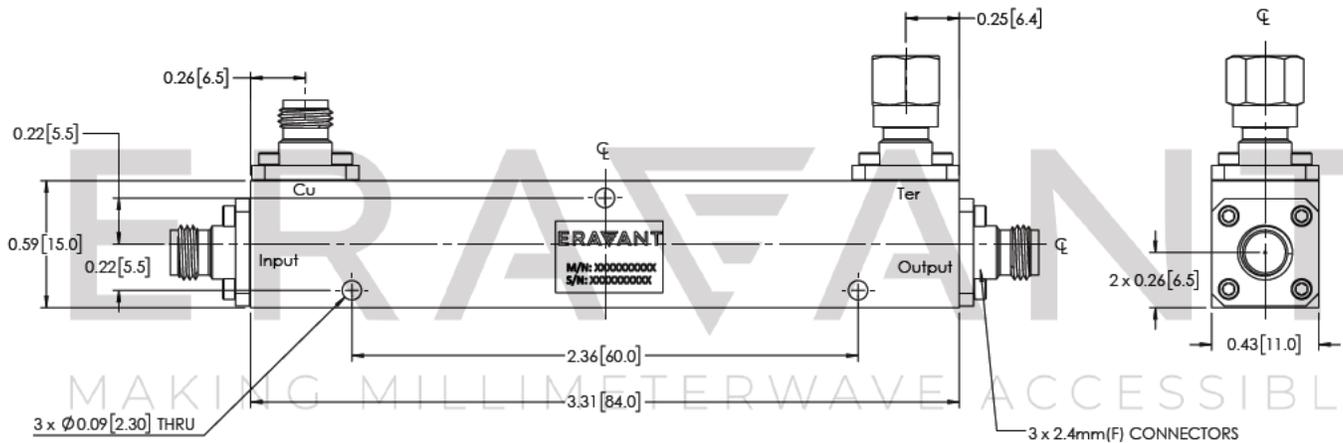


Typical Performance vs. Frequency



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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 slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.