SCZ-0520831609-SFSF-43

Coaxial Hybrid Coupler, 0.5 to 8 GHz, 90 Degrees

SCZ-0520831609-SFSF-43 is a coaxial 90-degree, hybrid coupler that covers the frequency range of 0.5 to 8 GHz. The nominial coupling is 3 dB and the typical insertion loss is 2.2 dB. The typical isolation of the coupler is 16 dB. The RF connectors of the coupler are female SMA connectors. The power handling of the coupler is 20 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 Range	0.5 GHz		8 GHz
Insertion Loss		2.2 dB	
Isolation		16 dB	
Coupling		3 dB	
Return Loss		14 dB	
Amplitude Unbalance		±0.9 dB	
Phase Unbalance		±12°	
Impedance		50 Ω	
Power Handling			20 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-45 °C		+85 °C

Mechanical Specifications:

Item	Specification
Input/Output Ports	SMA Female
Case Material	Aluminum
Finish	Epoxy Paint
Outline	CZ-SS-SR9

ECCN

EAR99

FEATURES

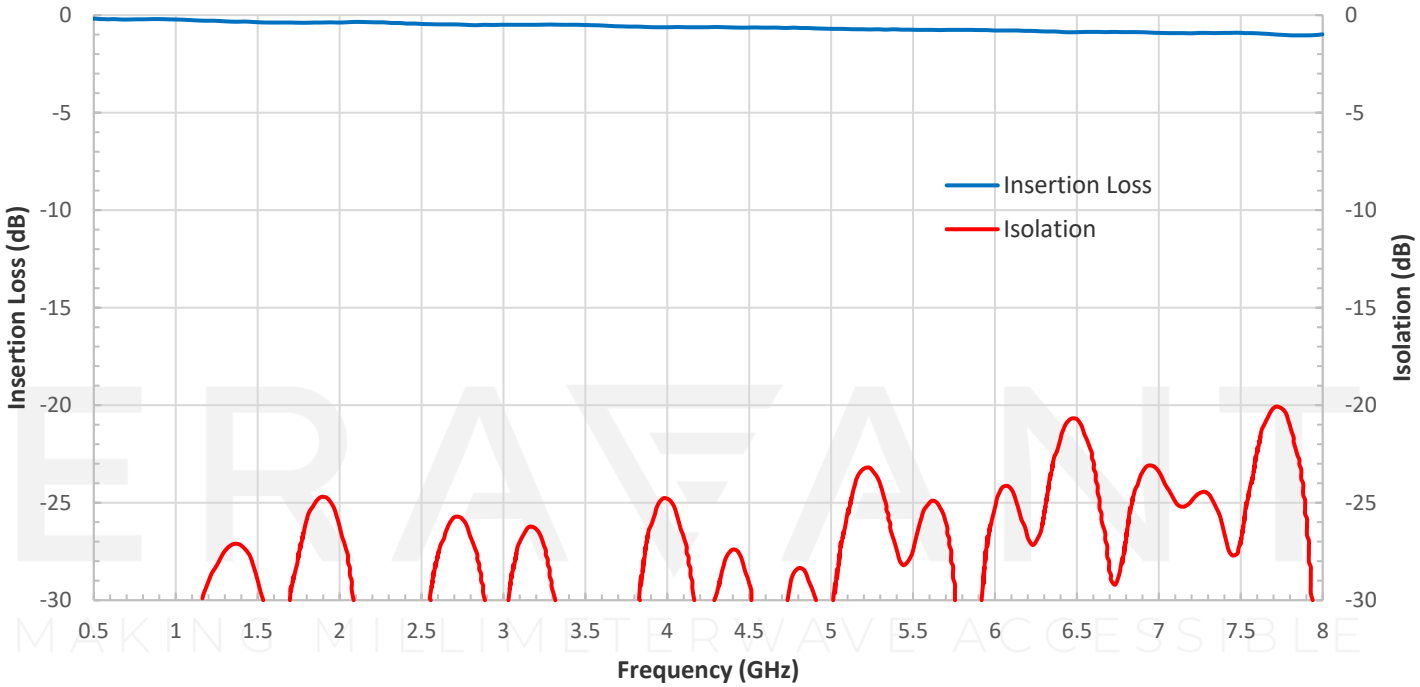
- Broad Band
- Low Insertion Loss
- Flat Coupling Level

APPLICATIONS

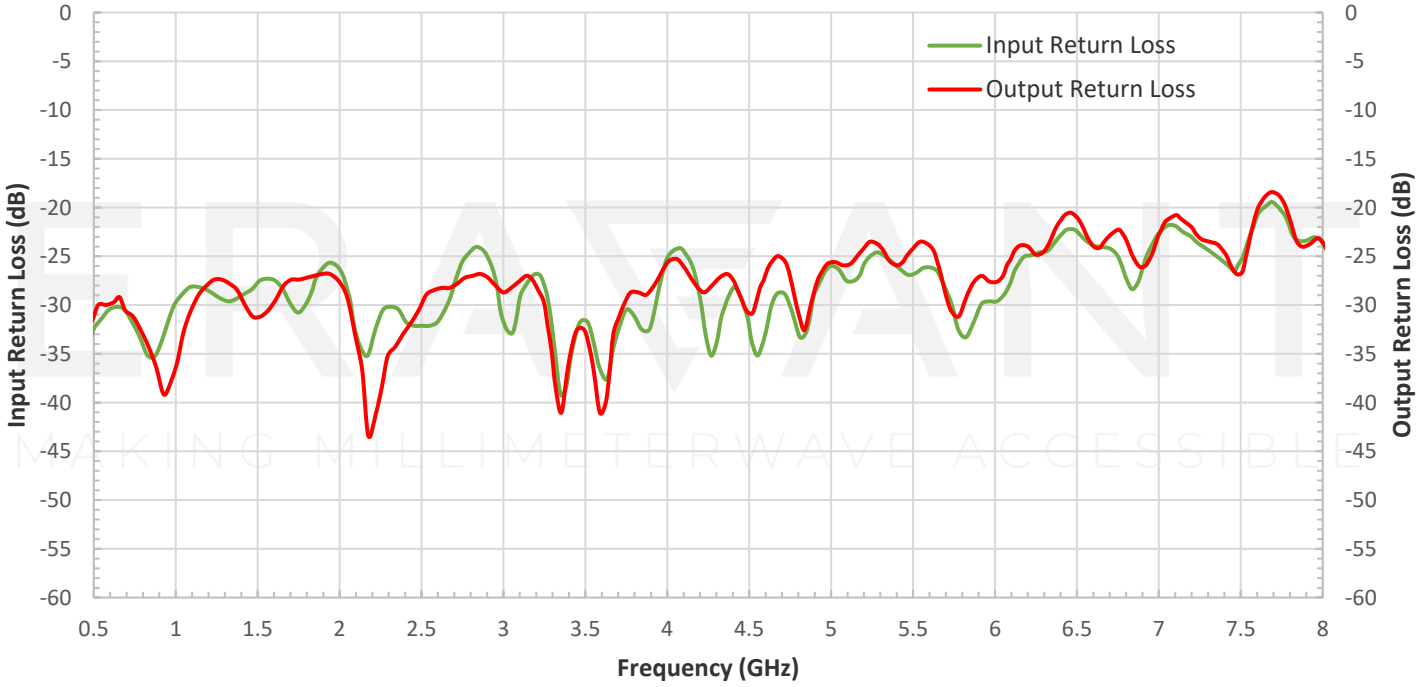
- Test Labs
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

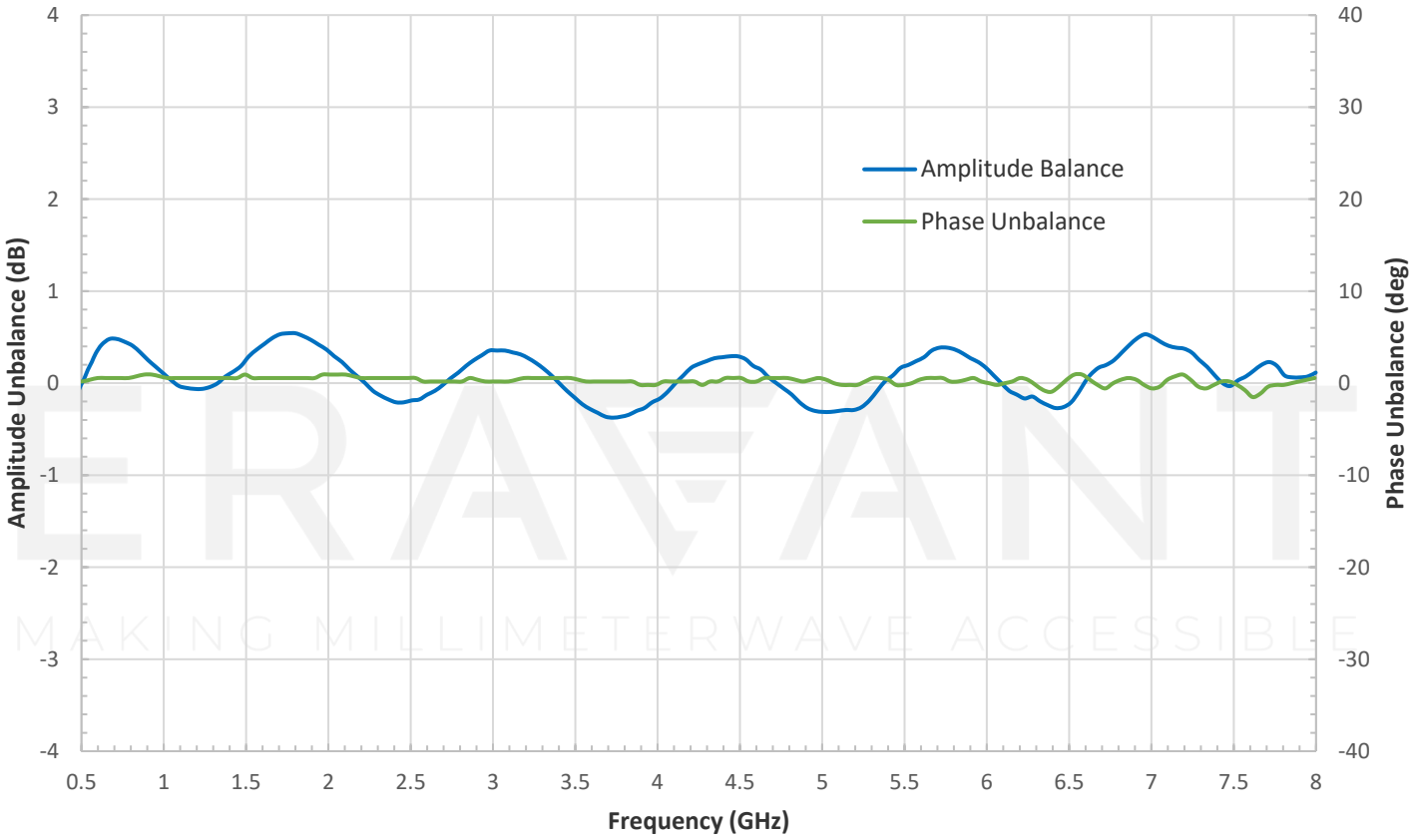
Typical Insertion Loss and Isolation vs. Frequency



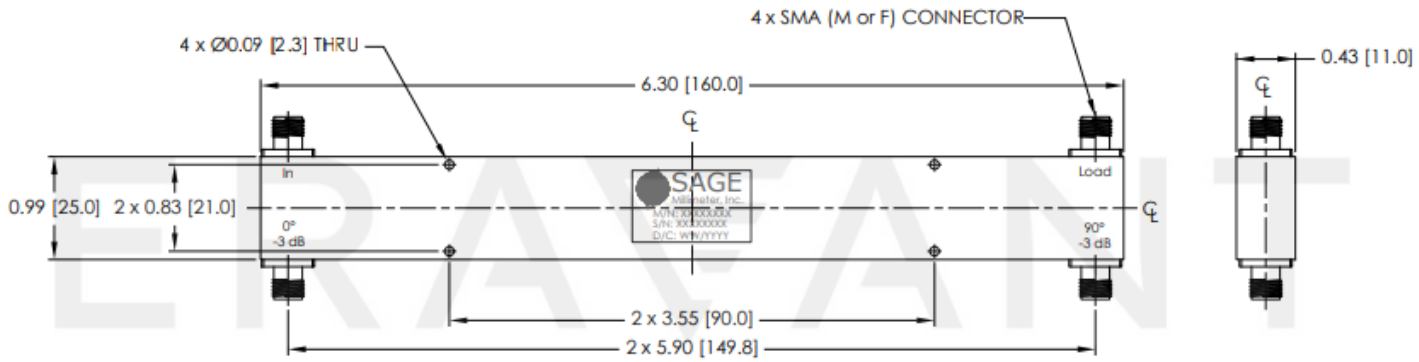
Typical Return Loss vs. Frequency



Amplitude and Phase Unbalance vs. Frequency



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 case temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- 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.