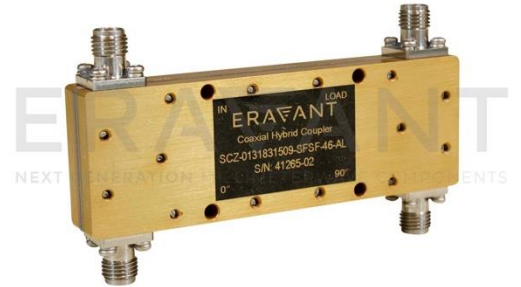


SCZ-0131831509-SFSF-46-AL

Coaxial Hybrid Coupler, 1 to 18 GHz, 90 Degrees Thermal Vacuum Safe

SCZ-0131831509-SFSF-46-AL is a coaxial 90-degree, thermal vacuum safe, hybrid coupler that covers the frequency range of 1 to 18 GHz. The nominal coupling is 3 dB and the typical insertion loss is 1.5 dB. The typical isolation of the coupler is 15 dB. The RF connectors of the coupler are female SMA 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 Range	1 GHz		18 GHz
Insertion Loss		1.5 dB	
Isolation		15 dB	
Coupling		3 dB	
Return Loss		18 dB	
Amplitude Unbalance		± 1.0 dB	
Phase Unbalance		$\pm 12^\circ$	
Impedance		50 Ω	
Power Handling			50 W (CW)
Specification Temperature		+25 $^\circ\text{C}$	
Operating Temperature	-45 $^\circ\text{C}$		+85 $^\circ\text{C}$

Mechanical Specifications:

Item	Specification
Input/Output Ports	SMA Female
Case Material	Aluminum
Finish	Chem Film, Yellow
Outline	CZ-SS-AL-FI3

ECCN

EAR99

FEATURES

- Broad Band
- Low Insertion Loss
- Flat Coupling Level
- Thermal Vacuum Safe

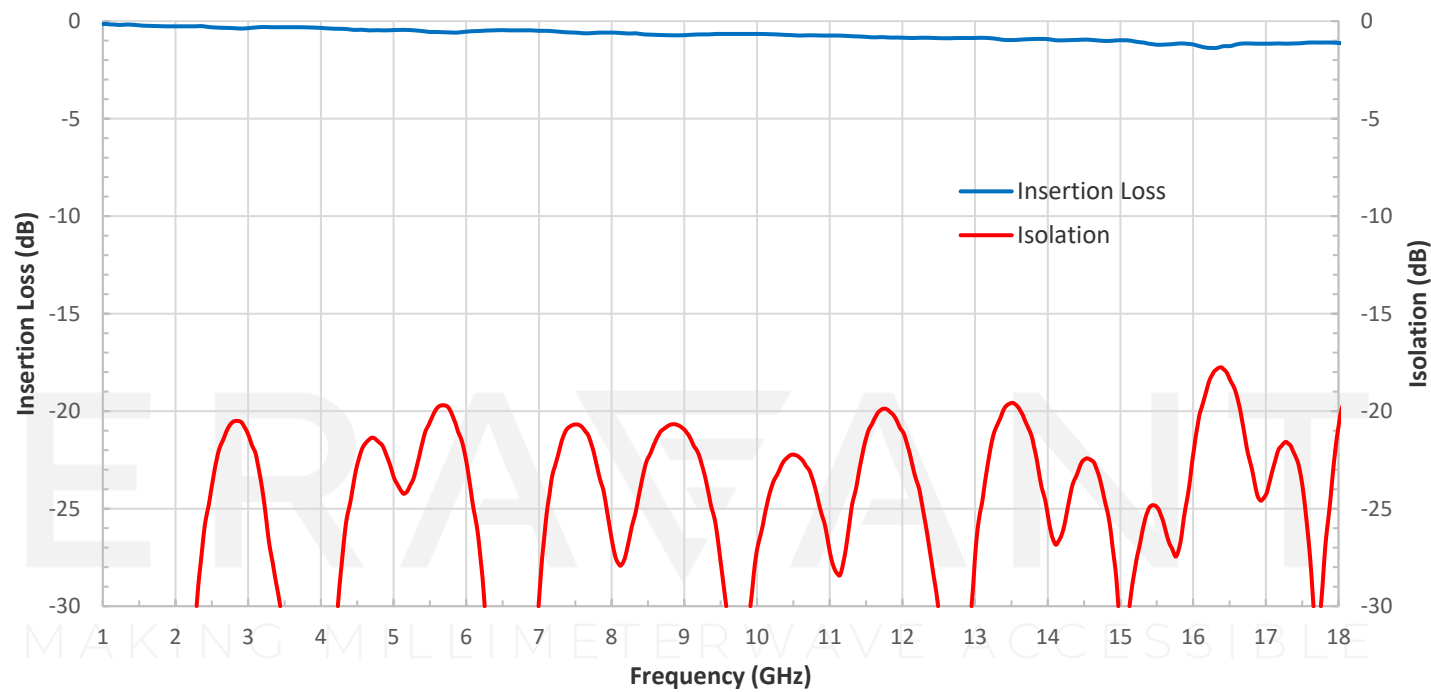
APPLICATIONS

- Test Labs
- Instrumentations
- Sub-assemblies

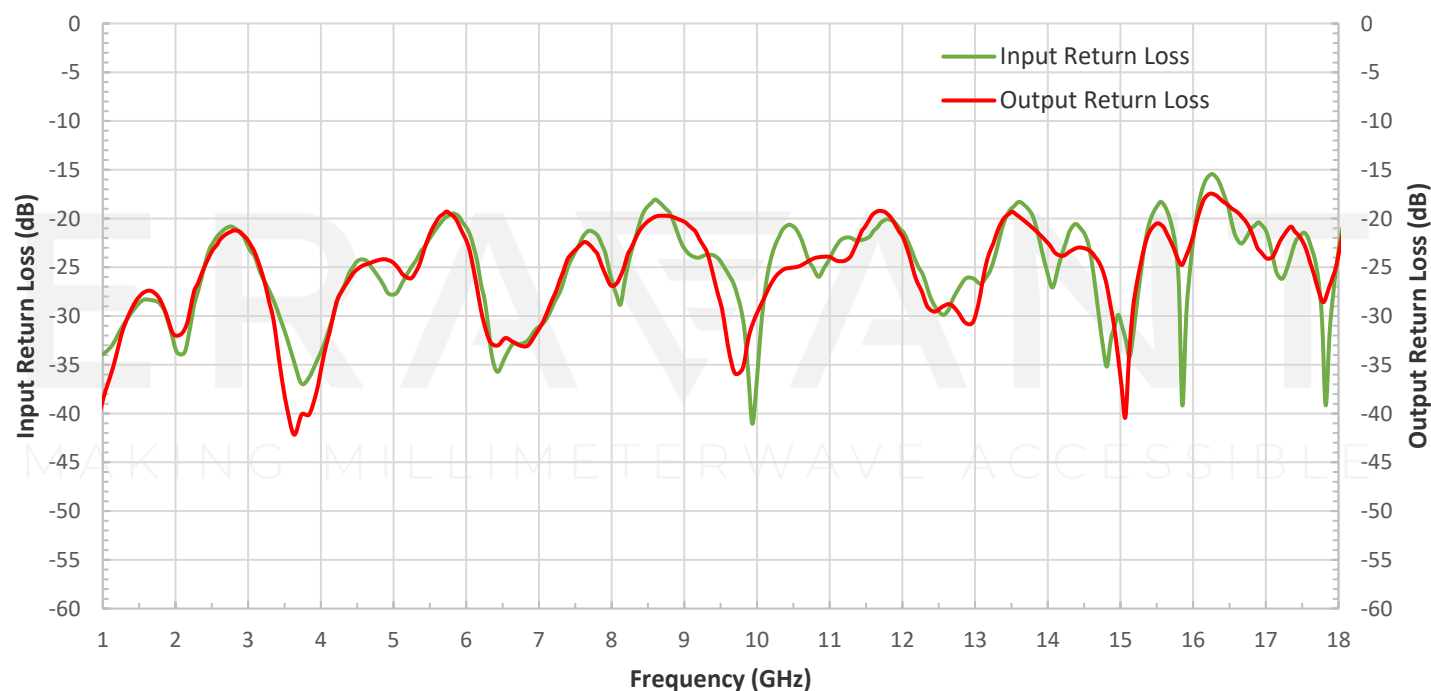
SUPPLEMENTAL DETAILS



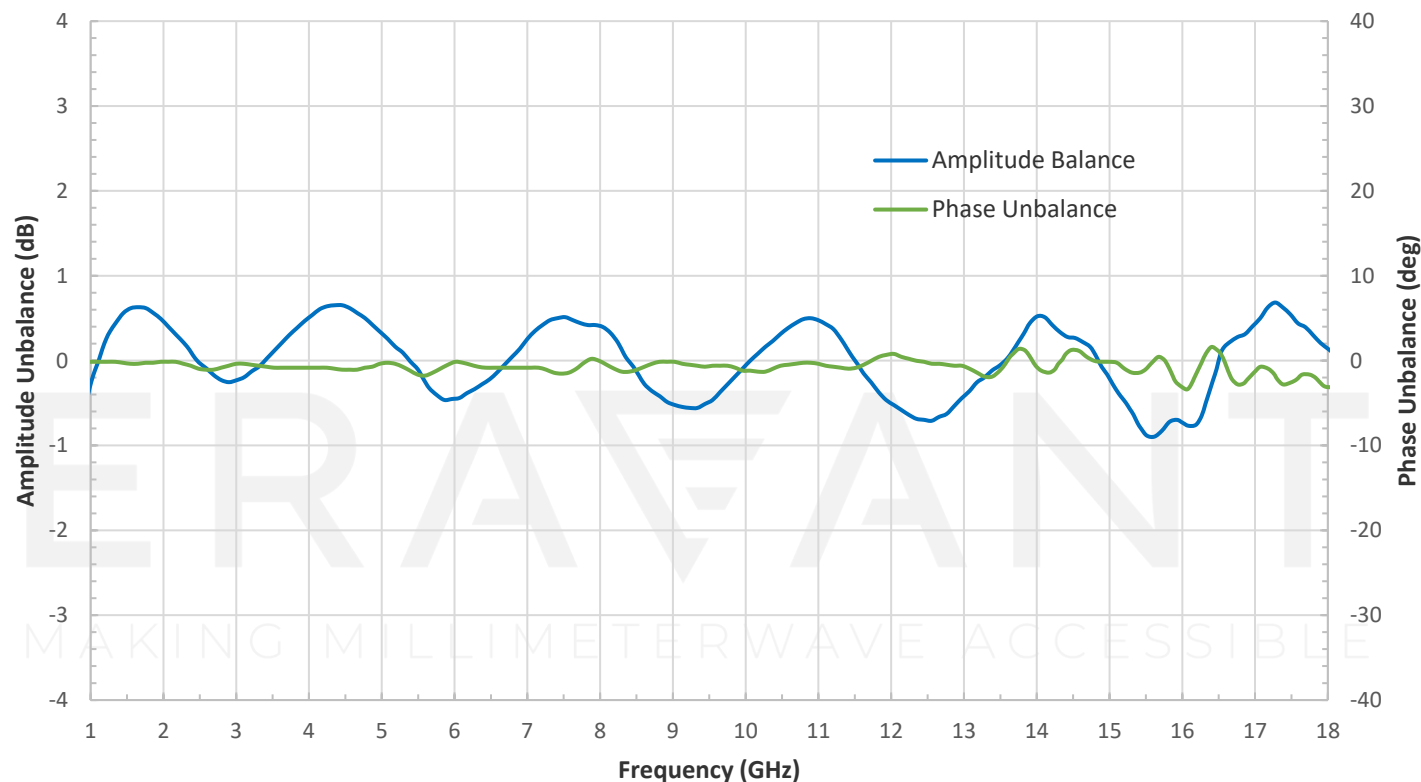
Typical Insertion Loss and Isolation vs. Frequency



Typical Return Loss vs. Frequency



Amplitude and Phase Unbalance vs. Frequency



Top view drawing of the ERAVANT 100W 400MHz-1.5GHz 1:1 Power Divider. The drawing shows a rectangular PCB with four SMA connectors (IN, Load, 0°, 90°) and two SMA connectors on the bottom edge. Dimensions are provided in inches and millimeters. Key features include: 4x Ø0.09 [2.3] THRU holes, 0.22 [5.5] inch wide SMA connectors, 0.43 [11.0] inch wide SMA connectors, and a central label with M/N: X00000000X and S/N: X00000000X. The overall dimensions are 2.91 [74.0] inches by 0.98 [25.0] inches.

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