



## Coaxial Hybrid Coupler, 2 to 40 GHz, 90 Degrees

### Description:

Model **SCZ-0234031009-KFKF-43** is a coaxial 90-degree hybrid coupler that covers the frequency range of 2.0 to 40 GHz. The nominal coupling is 3 dB and the typical insertion loss is 2.5 dB. The typical isolation of the coupler is 10 dB. The RF connectors of the coupler are female 2.92 mm 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.



### Features:

- Broad Band
- Low Insertion Loss
- Flat Coupling Level

### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	2 GHz		40 GHz
Insertion Loss		2.5 dB	
Isolation		10 dB	
Coupling		3 dB	
Return Loss		14 dB	
Amplitude Unbalance		±1.4 dB	
Phase Unbalance		±14°	
Impedance		50 Ω	
Power Handling			20 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-45 °C		+85 °C

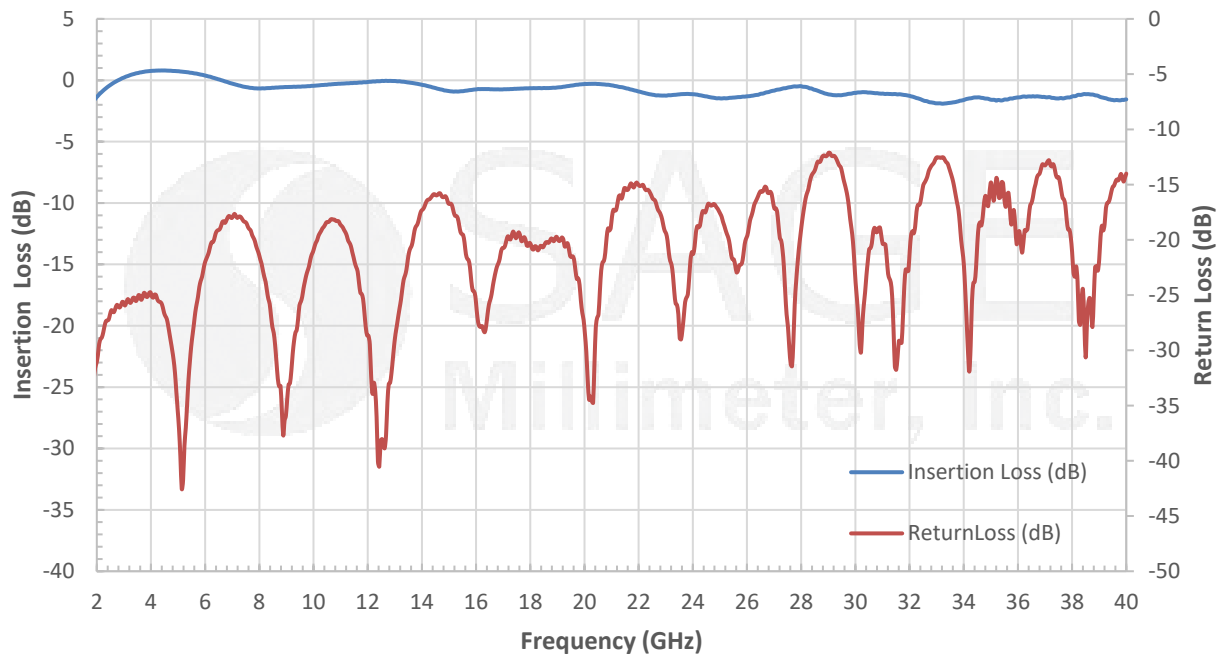
### Mechanical Specifications:

Item	Specification
Input/Output Ports	2.92 mm Female
Case Material	Aluminum
Finishing	Epoxy Paint
Weight	6 Oz
Outline	CZ-KK-SR6

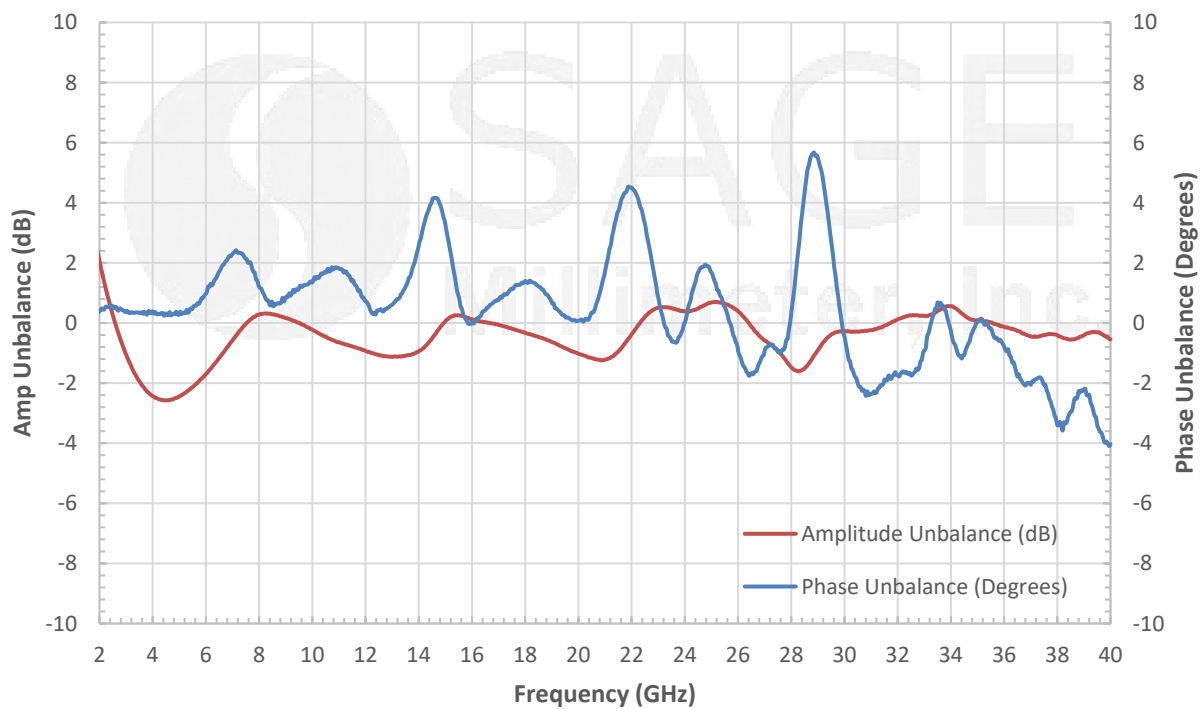


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### Typical Insertion Loss and Return Loss vs Frequency

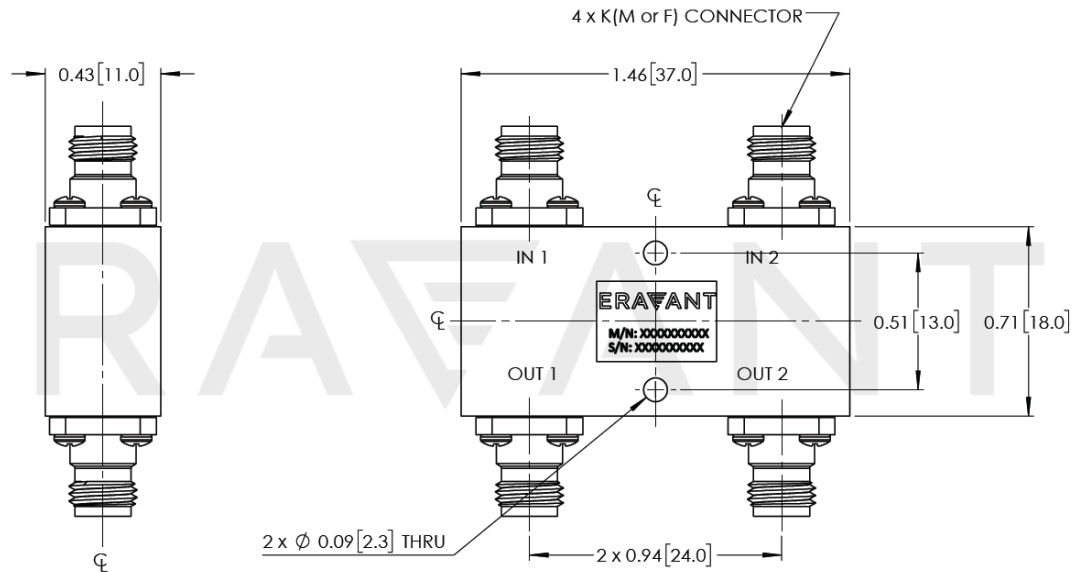


### Typical Amplitude and Phase Unbalance vs Frequency



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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,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **Eravant torque wrench, model SCH-08008-U3, is highly recommended.**