



## 4-Way Coaxial Power Splitter, 15 to 40 GHz

### Description:

**Model SCS-1534032916-KFKF-42** is a coaxial 4-way power splitter with a typical insertion loss of 2.9 dB at each output port and a typical isolation of 16 dB across the frequency range of 15 to 40 GHz. The power splitter has a nominal power handling of 20 W (CW) and a typical amplitude unbalance of  $\pm 0.5$  dB. The return loss for all ports is 12 dB typical. The RF connectors of the power splitter are female 2.92 mm (K) connectors.



### Features:

- Low Insertion Loss
- High Isolation
- Compact Package

### Applications:

- Test Lab
- Sub-assemblies
- Test Instrumentation

### Electrical Specifications:

| Parameter                 | Minimum | Typical         | Maximum   |
|---------------------------|---------|-----------------|-----------|
| Frequency Range           | 15 GHz  |                 | 40 GHz    |
| Insertion Loss*           |         | 2.9 dB          |           |
| Amplitude Unbalance       |         | $\pm 0.5$ dB    |           |
| Phase Unbalance           |         | $\pm 7.0^\circ$ |           |
| Port Isolation            |         | 16 dB           |           |
| Return Loss               |         | 12 dB           |           |
| Forward Power Handling    |         |                 | 20 W (CW) |
| Reverse Power Handling    |         |                 | 2 W (CW)  |
| Impedance                 |         | 50 Ohms         |           |
| Specification Temperature |         | +25 °C          |           |
| Operating Temperature     | -35 °C  |                 | +80 °C    |

\*Note: The insertion loss is circuit loss, which does not include the power dividing loss.

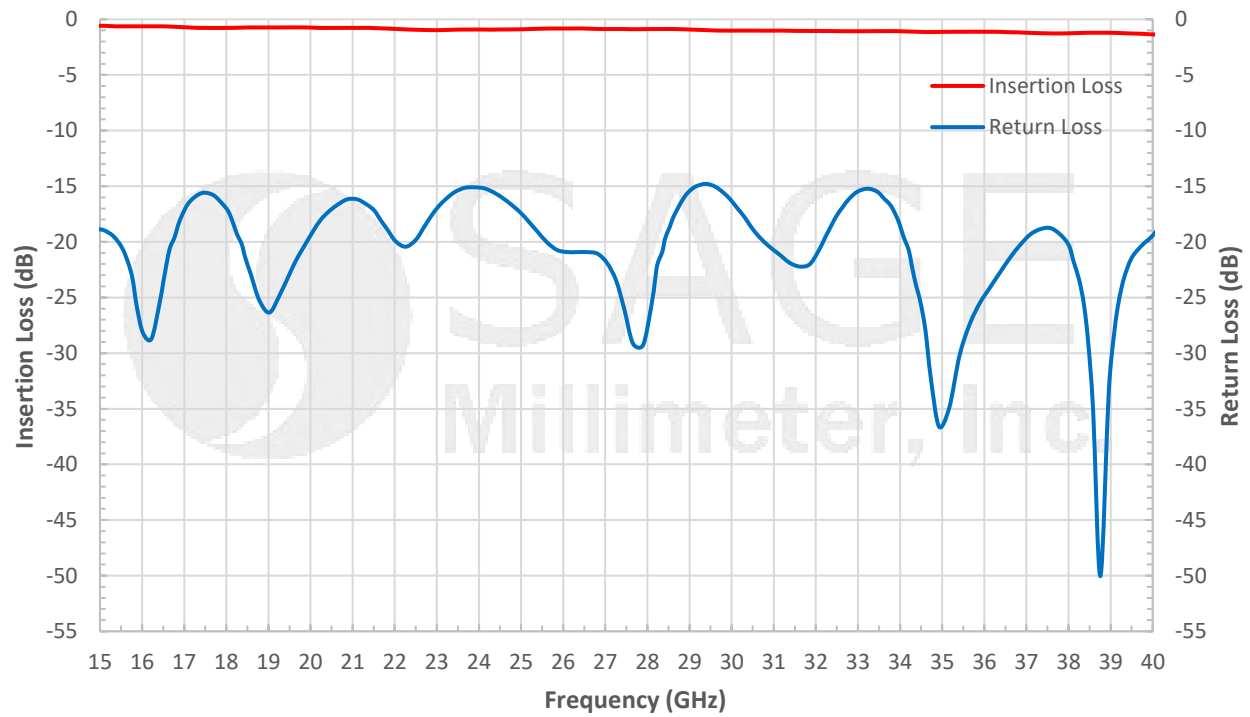
### Mechanical Specifications:

| Item          | Parameter                         |
|---------------|-----------------------------------|
| RF Connectors | K(F)                              |
| Case Material | Aluminum                          |
| Finish        | Black Paint                       |
| Size          | 2.05" (L) x 1.50" (W) x 0.50" (H) |
| Outline       | CS-A4-SR2                         |

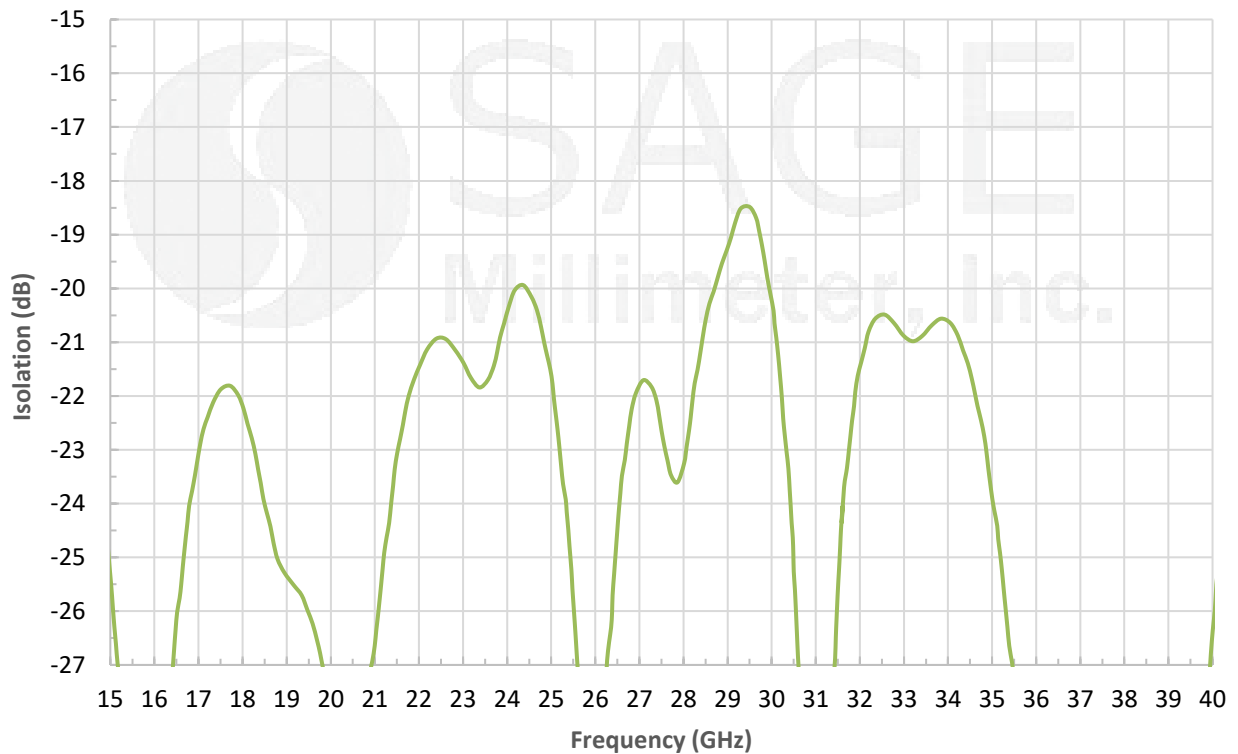


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### Typical Performance vs. Frequency

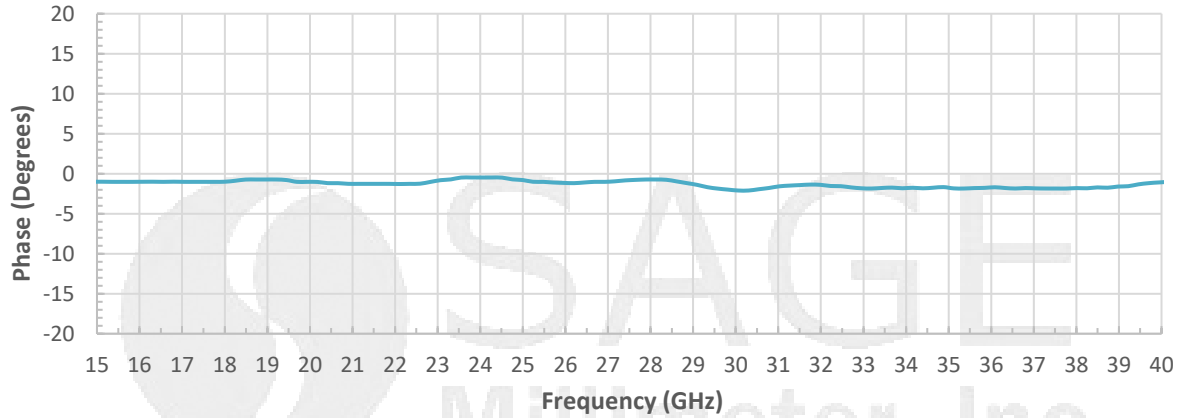


### Typical Isolation vs. Frequency

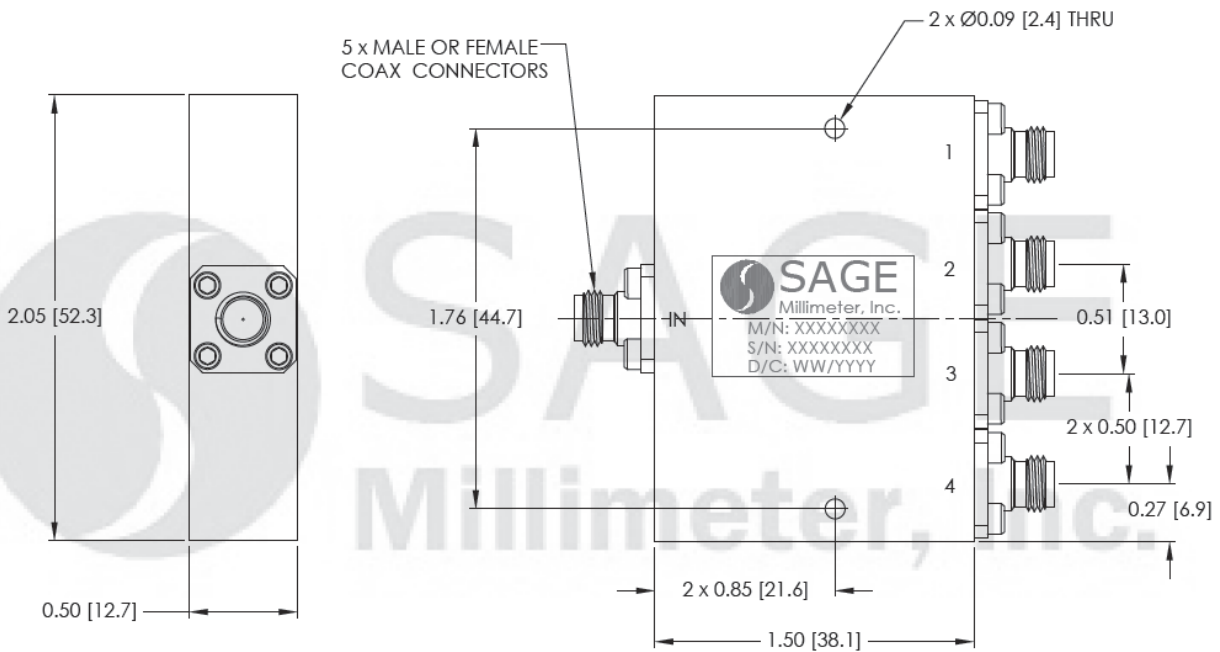


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### Typical Phase Unbalance vs. Frequency



### 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 unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### Caution:

- Exceeding absolute maximum ratings of the switch will damage the device.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**