

Ka-Band Waveguide to K Connector Adapter, End Launch

Description:

Models SWC-28KF-E1 and SWC-28KM-E1 are end launch (180°) Ka-Band waveguide to coax adapters that cover the frequency range of 26.5 to 40 GHz. They are designed and manufactured for instrumentation grade quality but offered at a commercial grade price, allowing for an efficient transition between the rectangular waveguide and 2.92 mm (K) coax connector. The right angle (90°) versions are offered under model numbers SWC-28KF-R1 and SWC-28KM-R1.



Features:

- Broad Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit

Applications:

- Test Lab
- Instrumentations
- Sub-assemblies

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|----------|---------|-----------|
| Frequency Range | 26.5 GHz | | 40.0 GHz |
| Insertion Loss | | 0.25 dB | |
| Return Loss | | 20 dB | |
| Power Handling | | | 20 W (CW) |
| Specification Temperature | | +25°C | |
| Operating Temperature | -40°C | | +85°C |

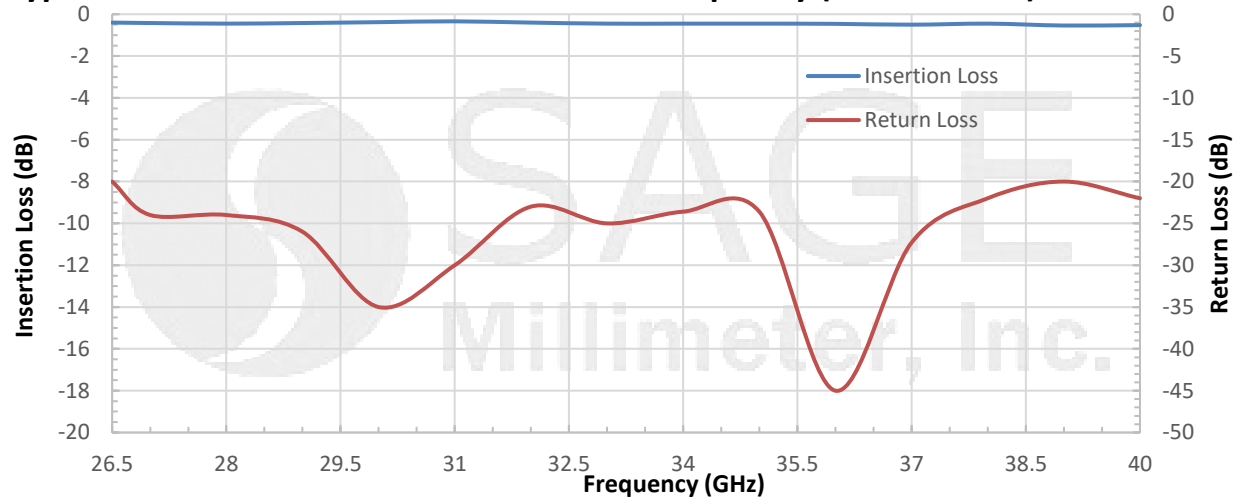
Mechanical Specifications:

| Item | Specification |
|------------------|---|
| Waveguide | WR-28 with UG599/U Flange |
| Coaxial | 2.92 mm (K) Female for Model Number: SWC-28KF-E1 |
| Coaxial | 2.92 mm (K) Male for Model Number: SWC-28KM-E1 |
| Size | 0.86" (L) x 0.75" (S) for Model Number: SWC-28KF-E1 |
| Size | 0.99" (L) x 0.75" (S) for Model Number: SWC-28KM-E1 |
| Housing Material | Aluminum |
| Finish | Gold Plated |
| Weight | 0.2 Oz |
| Outline | WC-AE |

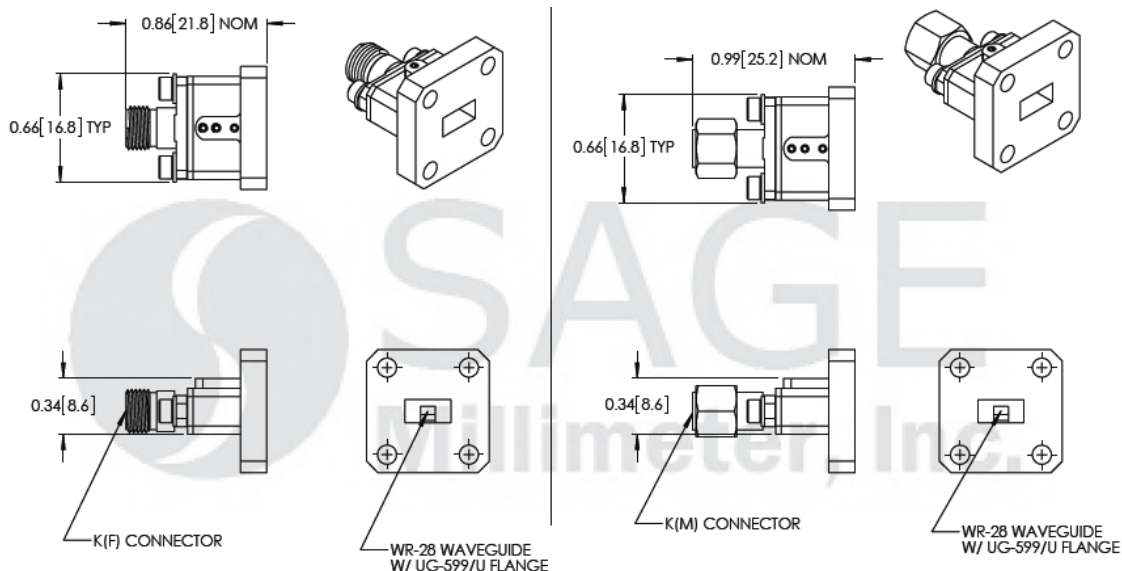


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Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches[millimeters])



Note:

- All data are presented using a limited sample lot, actual data may vary unit to unit.
- All testing was performed under 25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the waveguide will cause performance degradation and may damage the adapter.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-U3, is highly recommended.**

