

V-Band Waveguide to 1.35 mm Connector Adapter, End Launch

Description:

Models SWC-15EF-E1 and SWC-15EM-E1 are end launch (180°) V-Band waveguide to coax adapters that cover the frequency range of 50 to 75 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 1.35 mm (F) coax connector. The right angle (90°) versions are offered under model numbers SWC-15EF-R1 and SWC-15EM-R1.



Features:

- Full Waveguide Band Coverage
- Low Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit

Applications:

- Test Lab
- Instrumentation
- Sub-assemblies

Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|---------|-----------|
| Frequency Range | 50 GHz | | 75 GHz |
| Insertion Loss | | 0.5 dB | 15 |
| Return Loss | | 15 dB | |
| Power Handling | | | 10 W (CW) |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +85 °C |

Mechanical Specifications:

| Item | Parameter | |
|------------------|--|--|
| Waveguide | WR-15 with UG-385/U Anti-Cocking Flange | |
| Coaxial | 1.35 mm Female for Model Number: SWC-15EF-E1 | |
| Coaxial | 1.35 mm Male for Model Number: SWC-15EM-E1 | |
| Insertion Length | 0.45" (L) x 0.75" (Ø) | |
| Housing Material | Aluminum | |
| Finish | Gold Plated | |
| Weight | 0.3 Oz | |
| Outline | WC-V1E-A | |

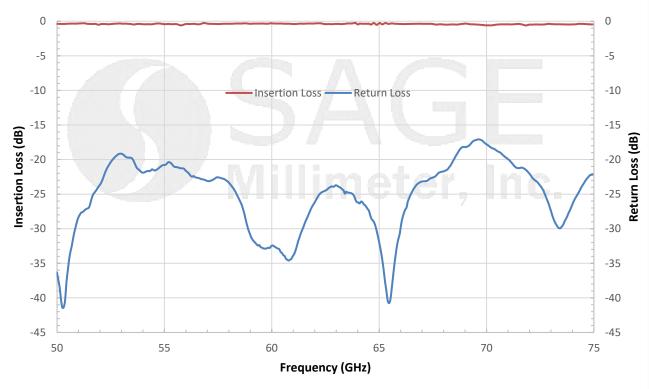


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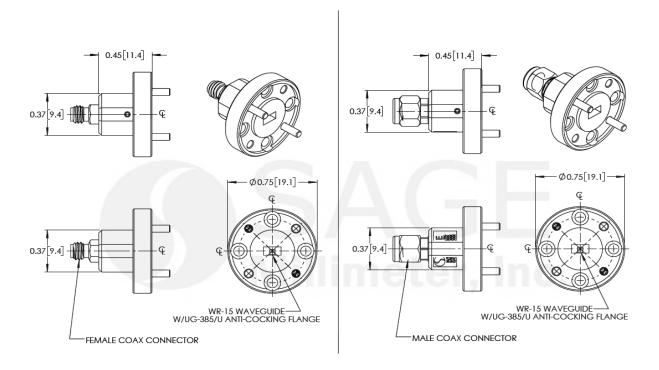
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Typical Insertion and Return Loss vs. Frequency



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





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SAGE Millimeter,



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:

- 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 used. Eravant torque wrench, model SCH-08008-U3, is highly recommended.





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