

## WR-12 Waveguide Cable, Flexible, 12" Long, Lower Insertion Loss

### Description:

**Model SCW-12E12E012-F1** is a 12" long WR-12 waveguide cable. The frequency range of the waveguide cable is 60 to 90 GHz. The cable allows for varied orientations of waveguide to waveguide connections. The cable has a typical insertion loss of 6.3 dB and a nominal return loss of 14 dB. The cable is flexible with minimum bend radius of 0.250". Other lengths are offered under different model numbers.



### Features:

- High Return Loss
- Low Insertion Loss
- Flexible

### Applications:

- Test Lab
- Subassemblies

### Electrical Specifications:

| Parameter                 | Minimum | Typical | Maximum  |
|---------------------------|---------|---------|----------|
| Frequency Range           | 60 GHz  |         | 90 GHz   |
| Insertion Loss            |         | 6.3 dB  |          |
| Return Loss               |         | 14 dB   |          |
| Power Handling            |         |         | 2 W (CW) |
| Specification Temperature |         | +25 °C  |          |
| Operation Temperature     | -40 °C  |         | +80 °C   |

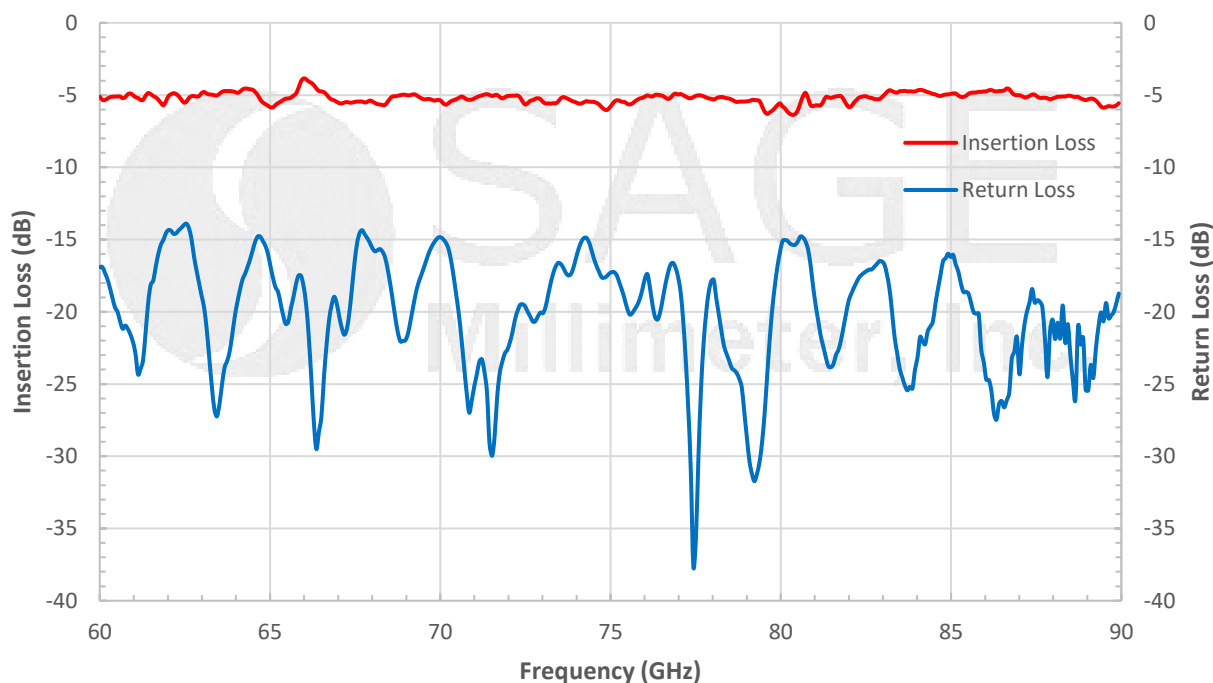
### Mechanical Specifications:

| Item                          | Specification                        |
|-------------------------------|--------------------------------------|
| Minimum Bending Radius        | 0.250"                               |
| Waveguides                    | WR-12 with UG-387/U Flange           |
| Waveguide Material and Finish | Gold Plated Aluminum                 |
| Cable Connectors              | 1.35 mm Male                         |
| Connector Material            | Passivated Stainless Steel           |
| Cable Material                | Fluorinated Ethylene Propylene (FEP) |
| Cable Outer Diameter          | 0.058"                               |
| Length                        | 12.0"                                |
| Weight                        | 1.17 Oz                              |
| Outline                       | CW-RERE-FS-L                         |

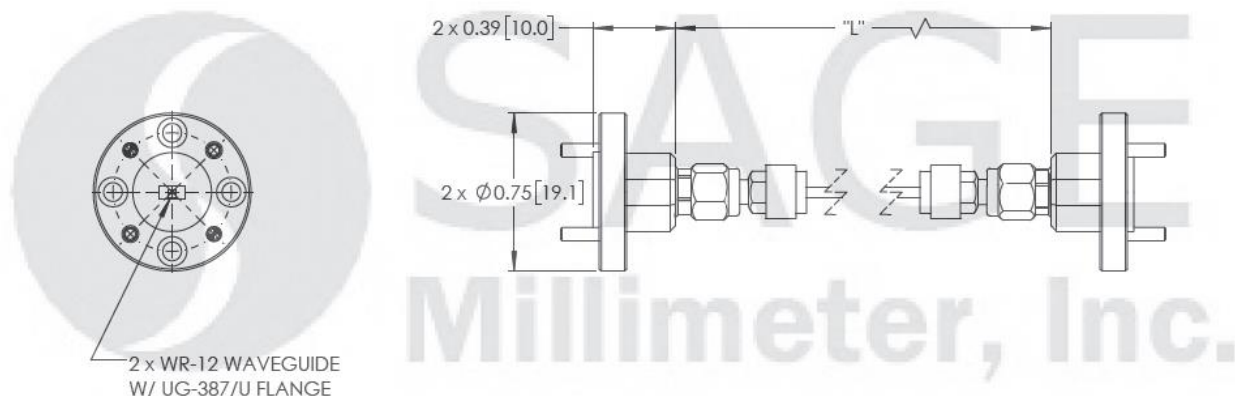


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### Typical Performance vs. Frequency



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



#### Note:

- Length "L" can be customizable.
- All data presented is collected from a 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:

- Bending the cable sharply will either cause damage or degrade the performance of the cable.
- Exceeding absolute maximum ratings shown will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

