

Description:

Model SWB-12090-TB-0.40 is a WR-12, 90°, compact waveguide twist with a UG-387/U-M flange on one end. The opposite end is compatible with a UG-387/U-M flange with 5/64 hex socket captive waveguide screws for attachment. The overall length of the twist is 0.40". The waveguide twist is manufactured through a precision machining process to ensure high quality and ruggedness. The waveguide twist is offered to cover the frequency range of 60 to 90 GHz.



Features:

- Frequency Coverage: 60.0 to 90.0 GHz
- Rugged Waveguide Configuration
- Low Insertion Loss
- Compact Size

Applications:

- Test Instrumentation
- Sub-assemblies
- Lab Use

Electrical Specifications:

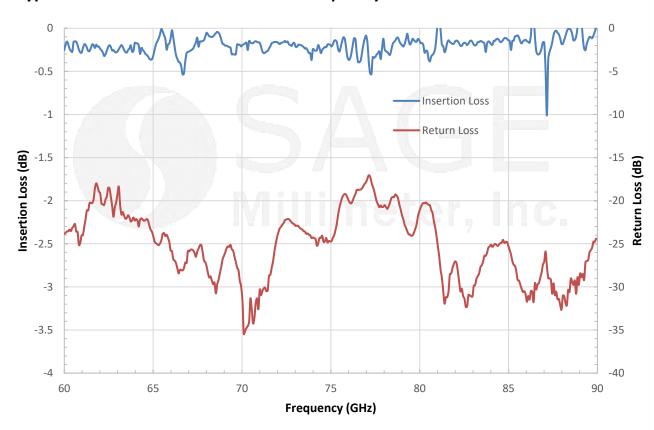
| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency | 60 GHz | | 90 GHz |
| Insertion Loss | | 0.2 dB | |
| Return Loss | | 20 dB | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +85 °C |

Mechanical Specifications:

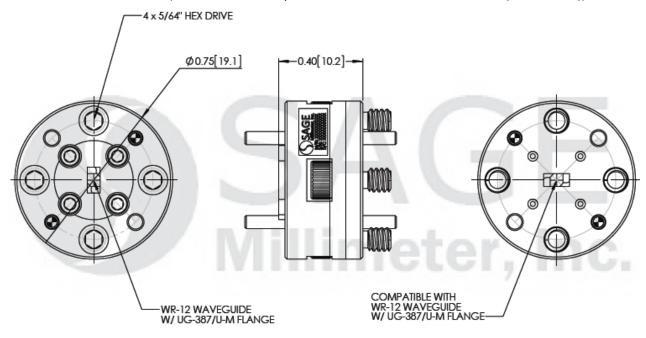
| Item | Specification | |
|------------------|--|--|
| Waveguide Size | WR-12 Waveguide with UG-387/U-M Flange | |
| Twist Angle | 90 Degrees | |
| Insertion Length | 0.40" | |
| Material | Brass | |
| Finish | Gold Plated | |
| Weight | 0.6 Oz | |
| Outline | WB-TE-0.40 | |



Typical Insertion and Return Loss vs. Frequency

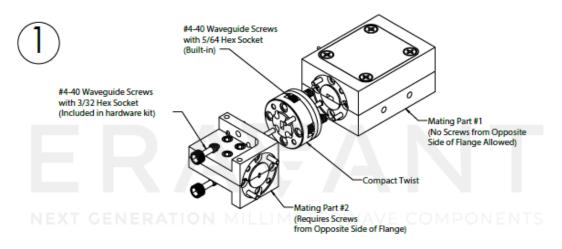


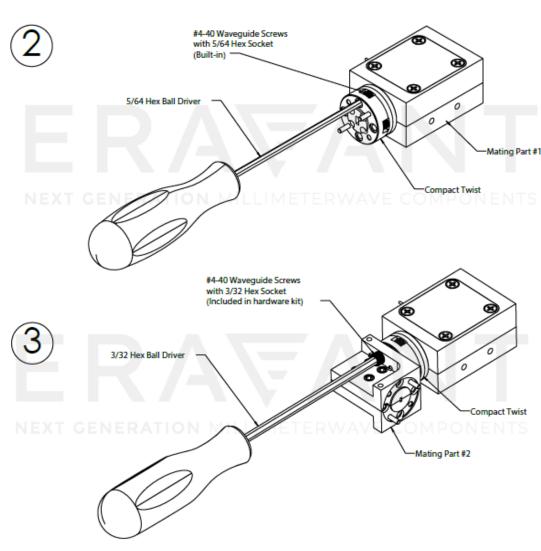
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])





HOW TO USE THE COMPACT TWIST









Note:

- A 5/64 hex screwdriver is required to access the built-in 5/64 hex socket waveguide screws.
- For more information on how to access the 5/64 hex socket waveguide screws, please see this blog: https://www.eravant.com/where-is-the-5-64-waveguide-screw-supposed-to-be-used
- 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 possible device damage.



