

**WR-12 45 Degree Waveguide Right-hand Twist  
 Using a UG-387/U Flange And a 60 GHz to 90 GHz  
 Frequency Range**

The SMW12TW1003 is a 45 degree right hand waveguide twist that is part of a family of precision manufactured twists with round flange per MIL-DTL-85. The family includes right and left hand 45 degree twists as well as 90 degree twists. These twists are offered in the Ka through W waveguide bands (18 to 110 GHz).

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	60		90	GHz
VSWR			1.16:1	
Insertion Loss			1.1	dB

**Mechanical Specifications**

Waveguide Size WR-12  
 Section Length 1.25 in [31.75 mm]

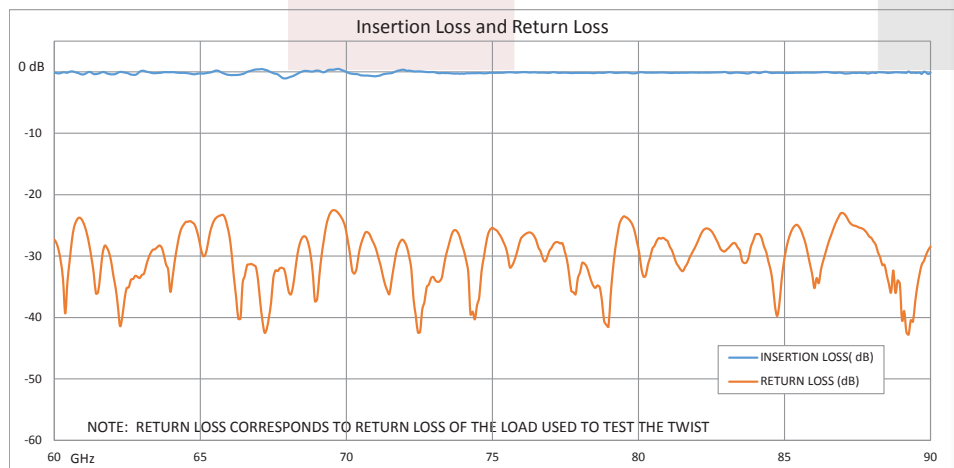
Description	Flange 1	Waveguide	Flange 2
Interface	UG-387/U	WR-12	UG-387/U
Material	Brass	Brass	Brass
Plating	Gold	Gold	Gold
Color	Gold	Gold	Gold

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

- Notes:
- Notes, Plotted Data

**Typical Performance Data**



**Features:**

- WR-12
- 60 to 90 GHz
- UG-387/U Flange
- 45° Right Hand (Clockwise) Twist
- 1.16:1 Maximum VSWR

**Applications:**

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production Systems

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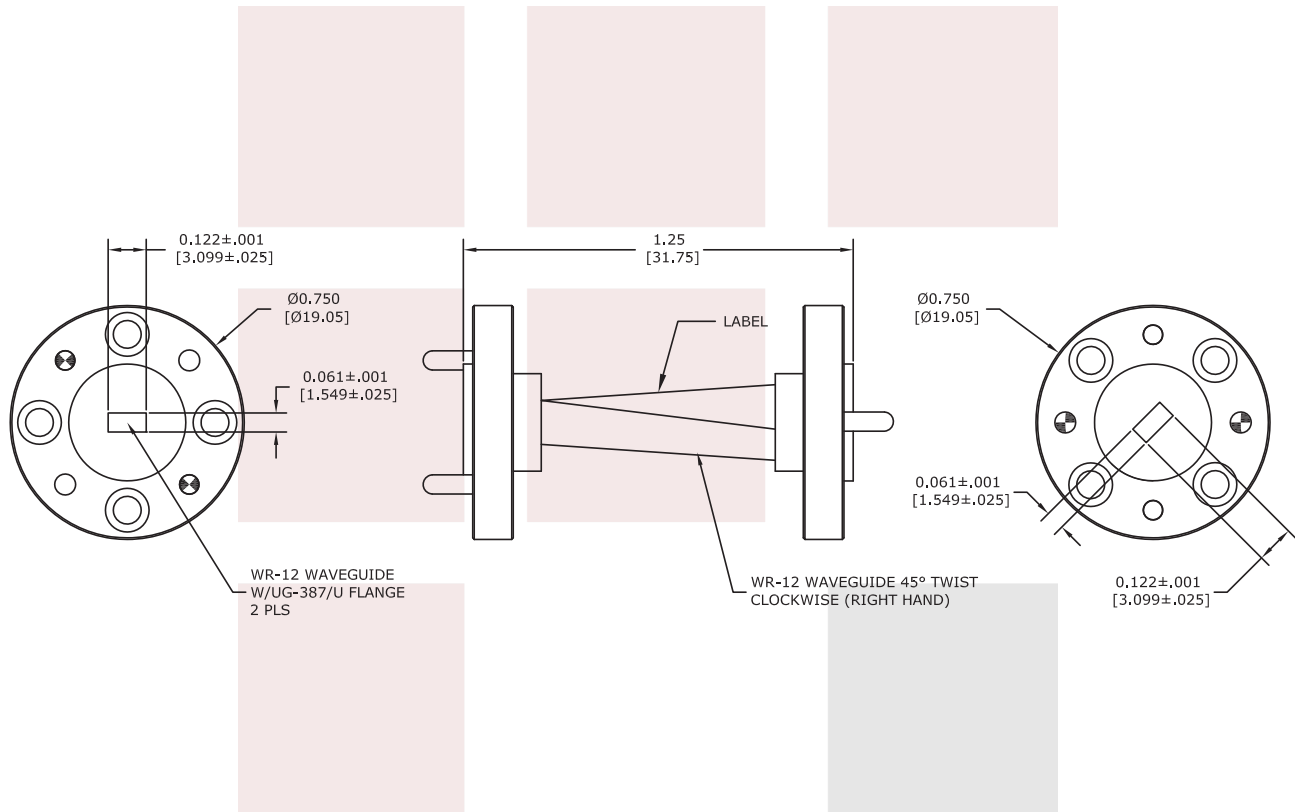
WR-12 45 Degree Waveguide Right-hand Twist Using a UG-387/U Flange And a 60 GHz to 90 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-12 45 Degree Waveguide Right-hand Twist Using a UG-387/U Flange And a 60 GHz to 90 GHz Frequency Range SMW12TW1003](#)

URL: <https://www.fairviewmicrowave.com/wr-12-45-waveguide-twist-ug387-60-90-ghz-smw12tw1003-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN: inches [mm]  
 TOLERANCES ARE:  
 .XX ± .10 [± 2.54]  
 .XXX ± .005 [± .127]

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE WR-12 45 Degree Waveguide Right-hand Twist Using a UG-387/U Flange And a 60 GHz to 90 GHz Frequency Range		DWG NO SMW12TW1003		CAGE CODE 3FKR5	
CAD FILE	122215	SHEET	SCALE	N/A	SIZE A 2233