

## WR-112 Twistable Flexible Waveguide Using UG-51/U Square Cover Flange With a 7.05 GHz to 10 GHz Frequency Range

The SMW112TF005-12 is one of Fairview Microwave's flexible, twistable sections which operates in the 7.05 to 10 GHz range. It can be twisted and/or bent in both the E and H planes without impairing VSWR or attenuation because of its silver coated helically wound brass body construction. The twistable section is covered in a neoprene jacket which allows the section to be pressurized as well as protecting the waveguide's integrity.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	7.05		10	GHz
VSWR		1.3:1		
Insertion Loss		0.12		dB

### Mechanical Specifications

Waveguide Size	WR-112
Waveguide Design	Twistable
Section Length	12 in [304.8 mm]
E-Plane Minimum Bend Radius, One Time	3 in [76.2 mm]
E-Plane Minimum Bend Radius, Repeated	12 in [304.8 mm]
H-Plane Minimum Bend Radius, One Time	6 in [152.4 mm]
H-Plane Minimum Bend Radius, Repeated	24 in [609.6 mm]
Maximum Offset Rotation, One Time	80 degrees/ft
Maximum Offset Rotation, Repeated	20 degrees/ft
Maximum Operating Pressure	35 psig

Description	Flange 1	Waveguide	Flange 2
Type	Square Cover	WR-112	Square Cover
Designation	UG-51/U		UG-51/U
Material	Brass	Brass	Brass
Plating		Silver	
Color	Gold	Black	Gold

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

### Plotted and Other Data

- Notes:
- Notes, Plotted Data



### Features:

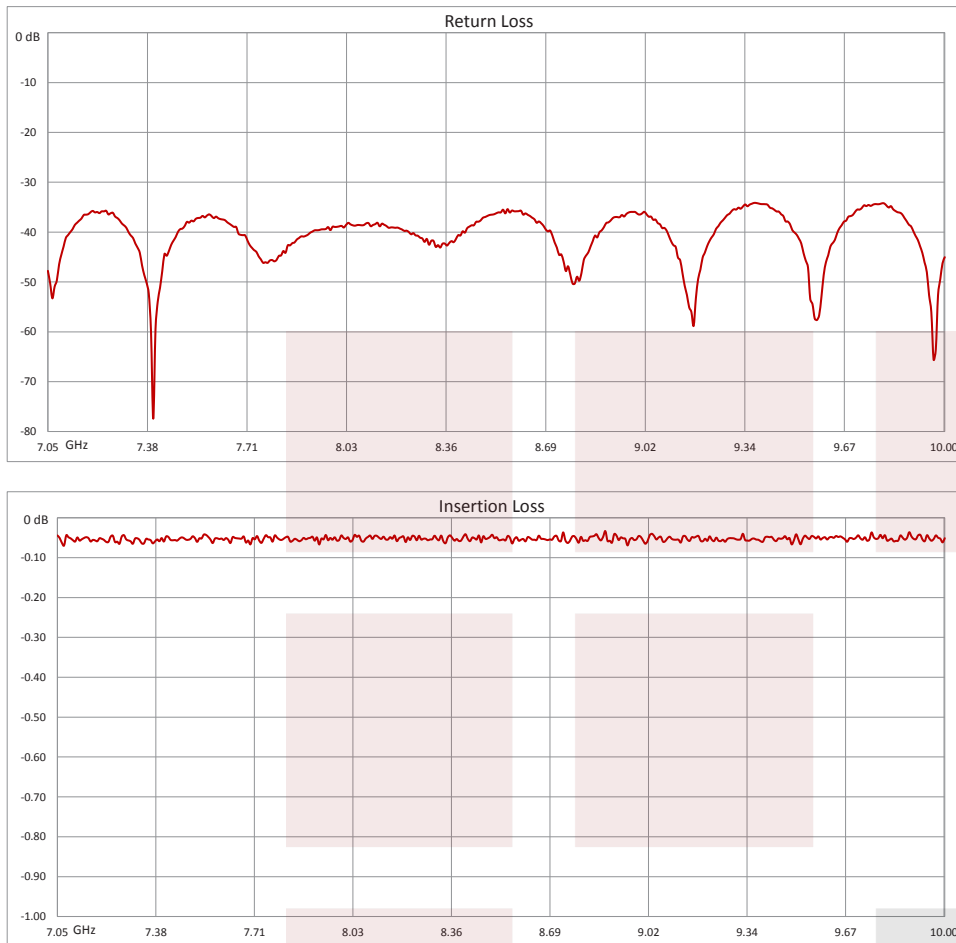
- Twistable/Flexible in both the E and H plane
- Neoprene Jacket allows pressurization
- 7.05 GHz to 10 GHz Range
- Brass flanges with a silver plated brass body

### Applications:

- Test Benches
- Microwave Radio
- Pressurized waveguide systems
- Provides vibration isolation
- Easily connects misaligned sections.
- Relieves mechanical stresses caused by thermal expansion/contraction.

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### Typical Performance Data

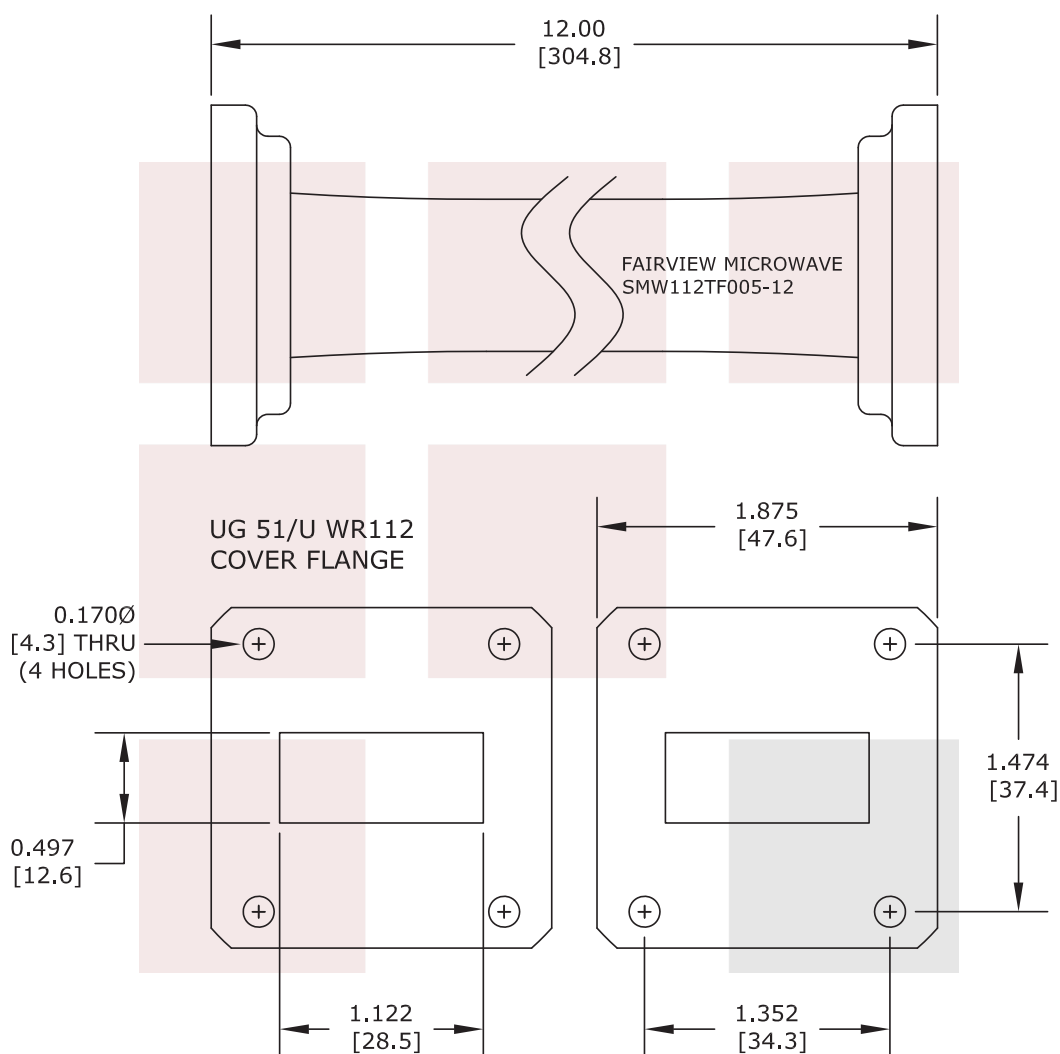


WR-112 Twistable Flexible Waveguide Using UG-51/U Square Cover Flange With a 7.05 GHz to 10 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-112 Twistable Flexible Waveguide Using UG-51/U Square Cover Flange With a 7.05 GHz to 10 GHz Frequency Range SMW112TF005-12](https://www.fairviewmicrowave.com/wr-112-twistable-flexible-waveguide-ug51-square-7.05-10-ghz-smw112tf005-12-p.aspx)

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TITLE WR-112 Twistable Flexible Waveguide Using UG-51/U Square Cover Flange With a 7.05 GHz to 10 GHz Frequency Range		DWG NO SMW112TF005-12		CAGE CODE 3FKR5	
CAD FILE	100515	SHEET	SCALE	N/A	SIZE A 2233