

WR-51 Twistable Flexible Waveguide Using Square Cover Flange With a 15 GHz to 22 GHz Frequency Range

The SMW51TF005-12 is one of Fairview Microwave's flexible, twistable sections which operates in the 15 to 22 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	15		22	GHz
VSWR		1.15:1		
Insertion Loss		0.55		dB

Mechanical Specifications

Waveguide Size	WR-51
Waveguide Design	Twistable
Section Length	12 in [304.8 mm]
E-Plane Minimum Bend Radius, One Time	2 in [50.8 mm]
E-Plane Minimum Bend Radius, Repeated	8 in [203.2 mm]
H-Plane Minimum Bend Radius, One Time	4 in [101.6 mm]
H-Plane Minimum Bend Radius, Repeated	16 in [406.4 mm]
Maximum Offset Rotation, One Time	136 degrees/ft
Maximum Offset Rotation, Repeated	34 degrees/ft
Maximum Operating Pressure	45 psig

Description	Flange 1	Waveguide	Flange 2
Type	Square Cover	WR-51	Square Cover
Designation	None		None
Material	Brass	Brass	Brass
Plating		Silver	
Color	Gold	Black	Gold

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

Plotted and Other Data

- Notes:
 • Notes, Plotted Data



Features:

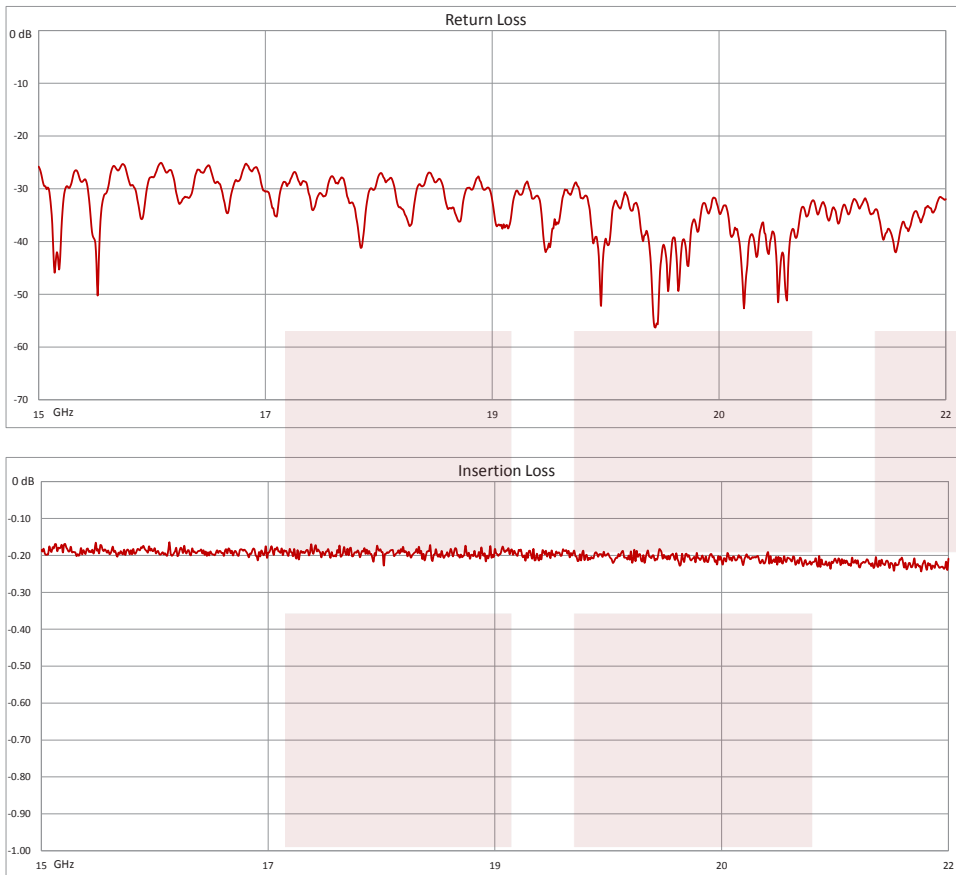
- Twistable/Flexible in both the E and H plane
- Neoprene Jacket allows pressurization
- 15 GHz to 22 GHz Range
- Brass flanges with a silver plated brass body

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

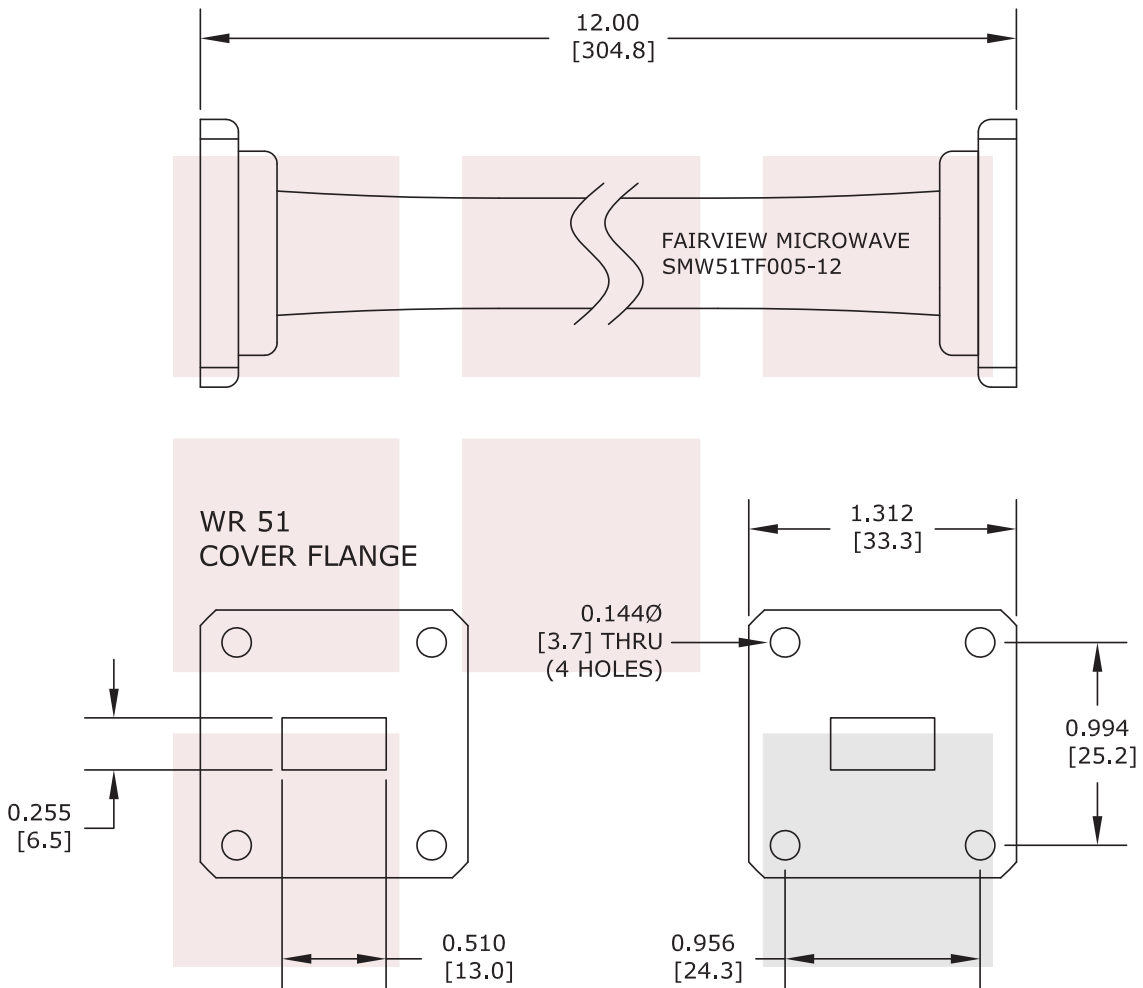


WR-51 Twistable Flexible Waveguide Using Square Cover Flange With a 15 GHz to 22 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-51 Twistable Flexible Waveguide Using Square Cover Flange With a 15 GHz to 22 GHz Frequency Range SMW51TF005-12](https://www.fairviewmicrowave.com/wr-51-twistable-flexible-waveguide-square-15-22-ghz-smw51tf005-12)

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TITLE WR-51 Twistable Flexible Waveguide Using Square Cover Flange With a 15 GHz to 22 GHz Frequency Range		DWG NO SMW51TF005-12		CAGE CODE 3FKR5	
CAD FILE	100515	SHEET	SCALE	N/A	SIZE
				A	2233