

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

The SMW51TF005-36 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		1.65		dB

Mechanical Specifications

Waveguide Size	WR-51
Waveguide Design	Twistable
Section Length	36 in [914.4 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:

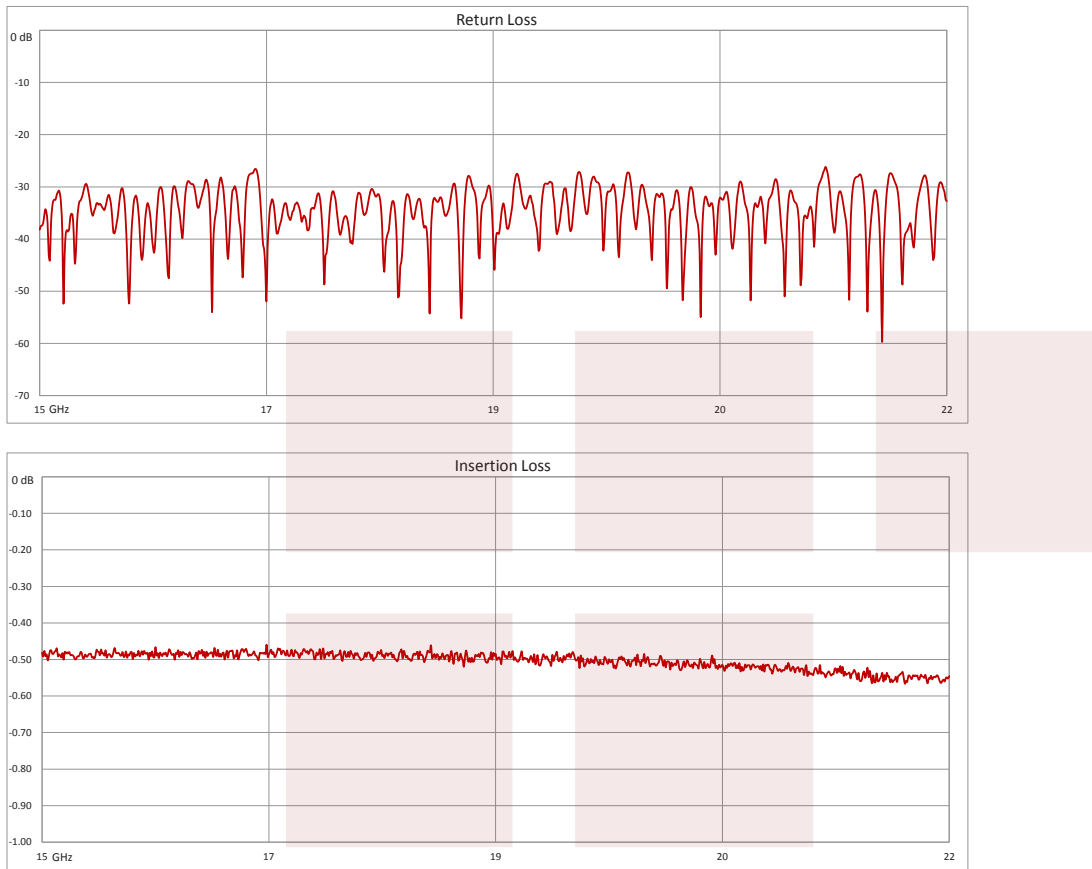
- Twistable/Flexible in both the E and H plane
- Neoprene Jacket allows pressurization
- 15 GHz to 22 GHz Range
- Brass flanges with a silver plated brass body

Applications:

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

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data

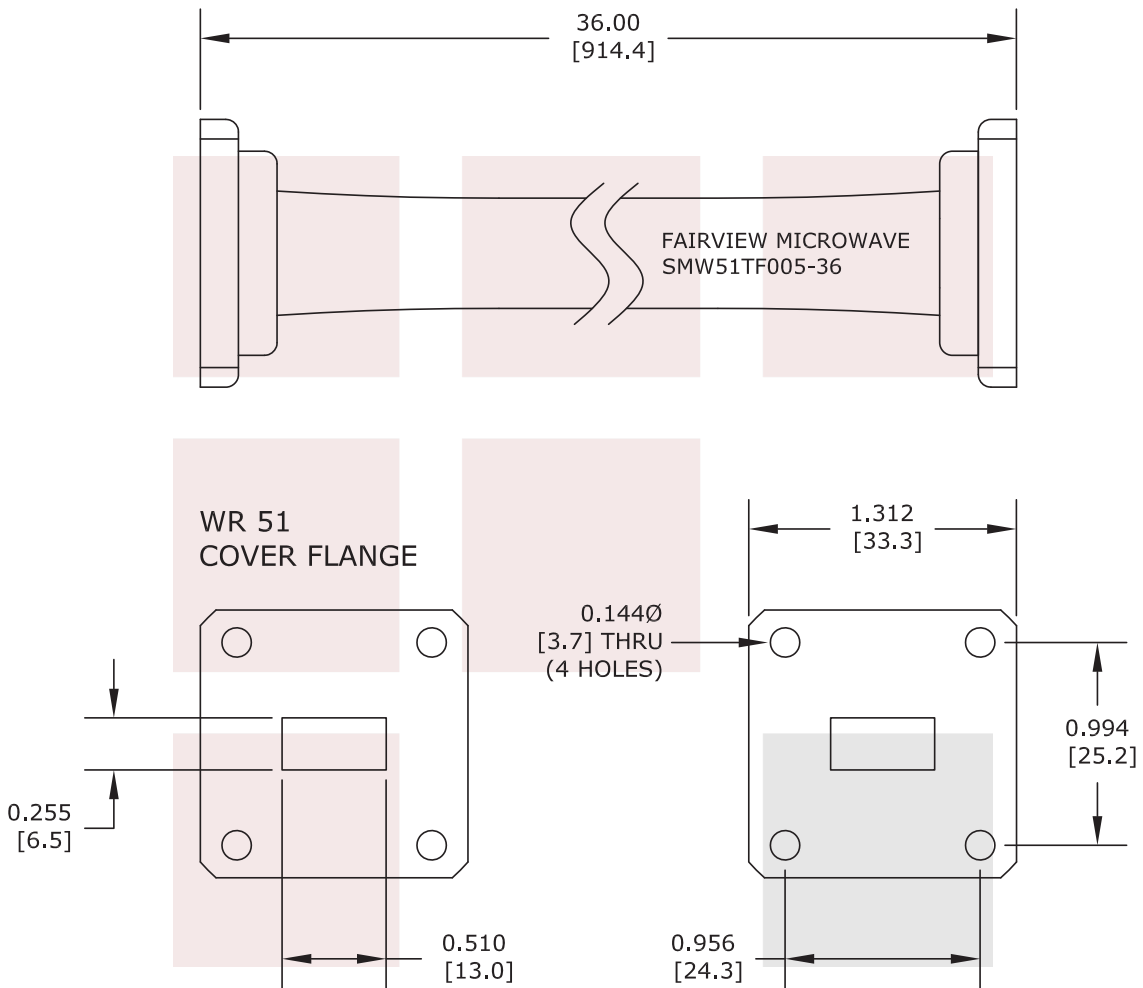


WR-51 Twistable Flexible Waveguide Using Square Cover Flange With a 15 GHz to 22 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave 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 SMW51TF005-36](https://www.fairviewmicrowave.com/wr-51-twistable-flexible-waveguide-square-15-22-ghz-smw51tf005-36)

URL: <https://www.fairviewmicrowave.com/wr-51-twistable-flexible-waveguide-square-15-22-ghz-smw51tf005-36-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.



FAIRVIEW MICROWAVE INC. 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-51 Twistable Flexible Waveguide Using Square Cover Flange With a 15 GHz to 22 GHz Frequency Range		DWG NO SMW51TF005-36		CAGE CODE 3FKR5	
CAD FILE	100515	SHEET	SCALE	N/A	SIZE A 2233