

WR-22 Twistable Flexible Waveguide in 24 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range

The SMW22TF005-24 is part of Fairview’s family of flexible, twistable waveguides which operates in the 33 to 50 GHz, Q Band range. The flexible waveguide section is made of a helically wound silver coated brass strip. It can be twisted and/or bent in both the E and H planes without impairing VSWR or attenuation. The waveguide section is covered by a neoprene jacket which protects the waveguide, provides mechanical support and allows the waveguide to be pressurized.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	33		50	GHz
VSWR		1.3:1		
Insertion Loss		0.6		dB

Mechanical Specifications

Waveguide Size	WR-22
Waveguide Design	Twistable
Section Length	24 in [609.6 mm]
E-Plane Minimum Bend Radius, One Time	1 in [25.4 mm]
E-Plane Minimum Bend Radius, Repeated	4 in [101.6 mm]
H-Plane Minimum Bend Radius, One Time	2 in [50.8 mm]
H-Plane Minimum Bend Radius, Repeated	8 in [203.2 mm]
Maximum Offset Rotation, One Time	180 degrees/ft
Maximum Offset Rotation, Repeated	70 degrees/ft
Maximum Operating Pressure	45 psig

Description	Flange 1	Waveguide	Flange 2
Type	Round Cover	WR-22	Round Cover
Designation	UG-383/U		UG-383/U
Material	Brass	Brass	Brass
Plating		Silver	
Color	Gold	Black	Gold

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

Plotted and Other Data

- Notes:
- Notes, Plotted Data



Features:

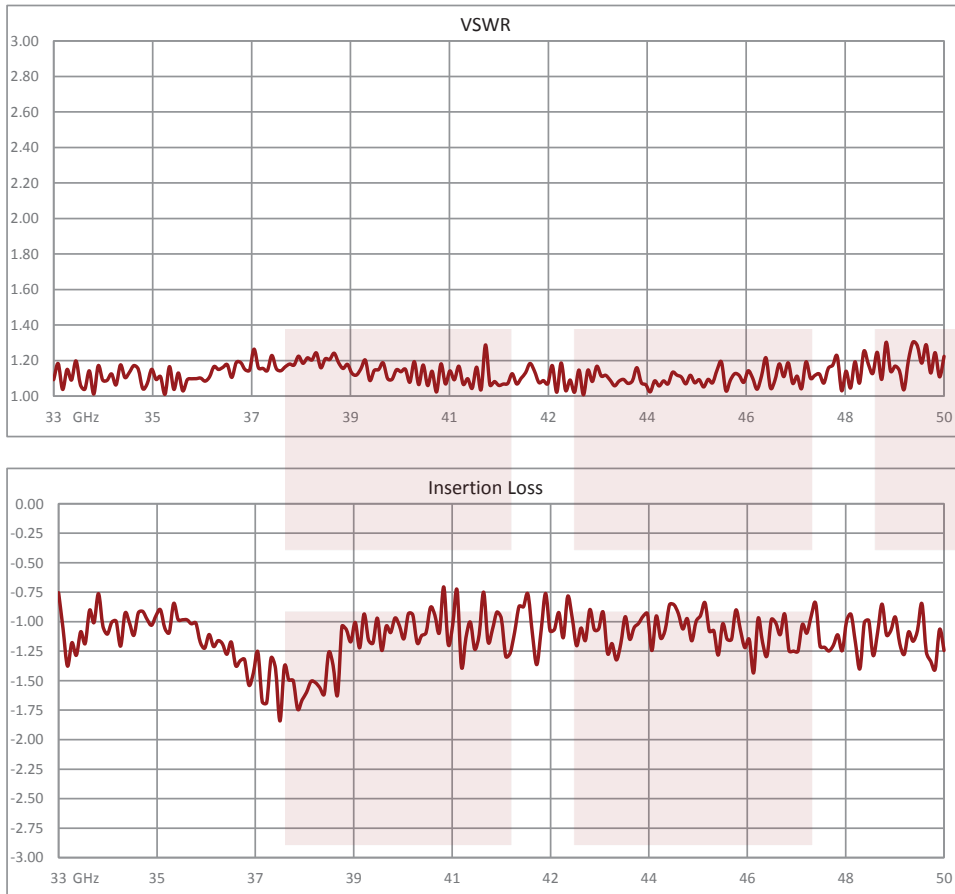
- Twenty Four inch long WR-22 waveguide
- Twistable
- Flexes in both the E and H plane
- Neoprene sleeve allows pressurization
- UG-383/U Round Cover Flange
- Q Band
- 33 GHz to 50 GHz Frequency Range
- Brass flanges with a silver plated brass body

Applications:

- Simplifies positioning parabolic reflectors for line of sight microwave radio links.
- Test Benches
- Eliminates installation problems caused by misalignment.
- Allows expansion/contraction due to thermal issues.
- Pressurized waveguide systems
- Provides vibration isolation
- Microwave Radio

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Typical Performance Data

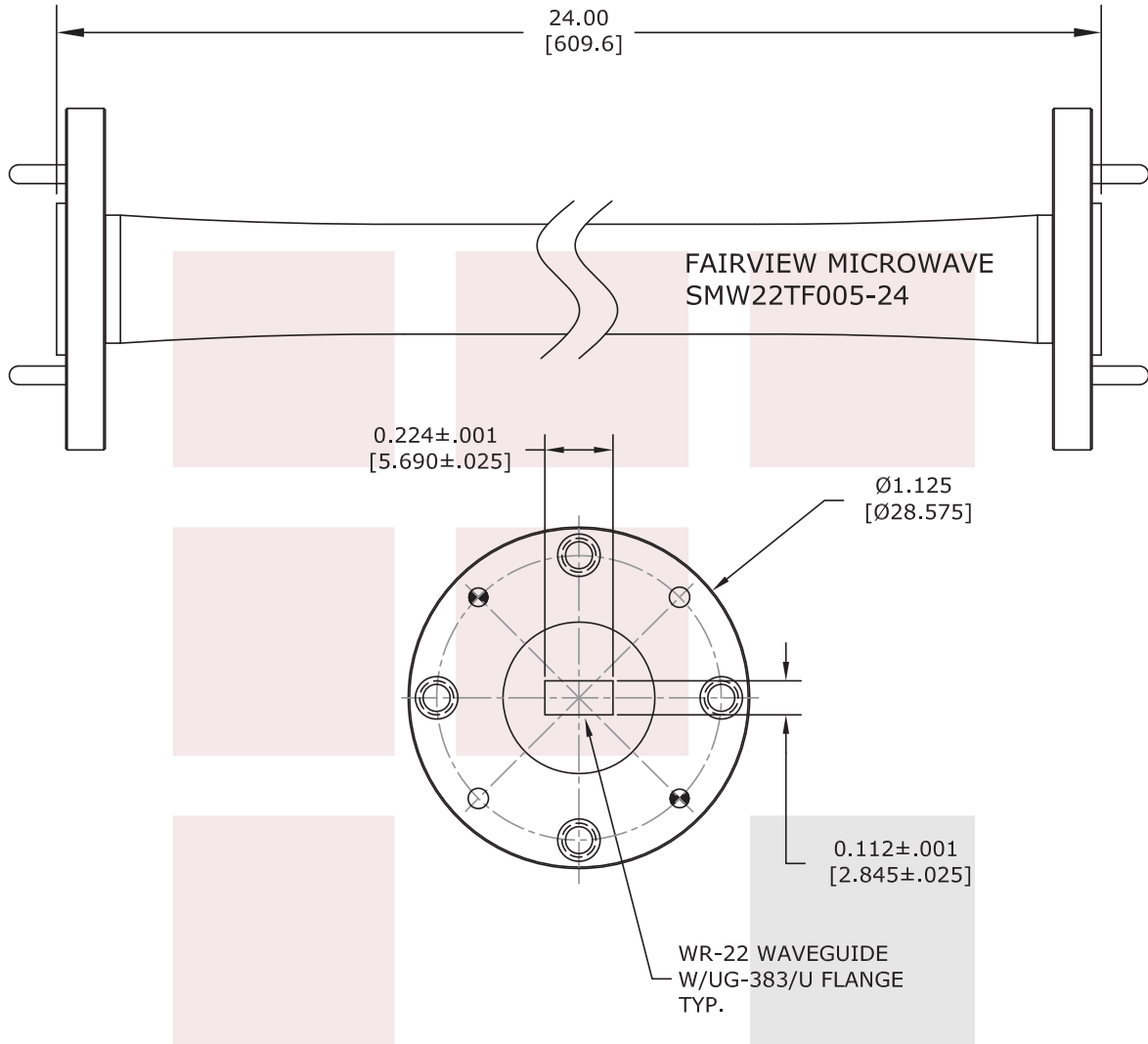


WR-22 Twistable Flexible Waveguide in 24 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-22 Twistable Flexible Waveguide in 24 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range SMW22TF005-24](#)

URL: <https://www.fairviewmicrowave.com/wr-22-twistable-flexible-waveguide-ug383-round-33-50-ghz-smw22tf005-24-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:

DECIMALS	ANGLES	FRACTIONS
.X ±.030	±1/2°DEG.	± 1/32
.XX ±.015		
.XXX ±.005		

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

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-22 Twistable Flexible Waveguide in 24 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range		DWG NO SMW22TF005-24		CAGE CODE 3FKR5	
CAD FILE	012017	SHEET	SCALE	N/A	SIZE A 2233