

WR-22 Twistable Flexible Waveguide in 12 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range

The SMW22TF005-12 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	12 in [304.8 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:

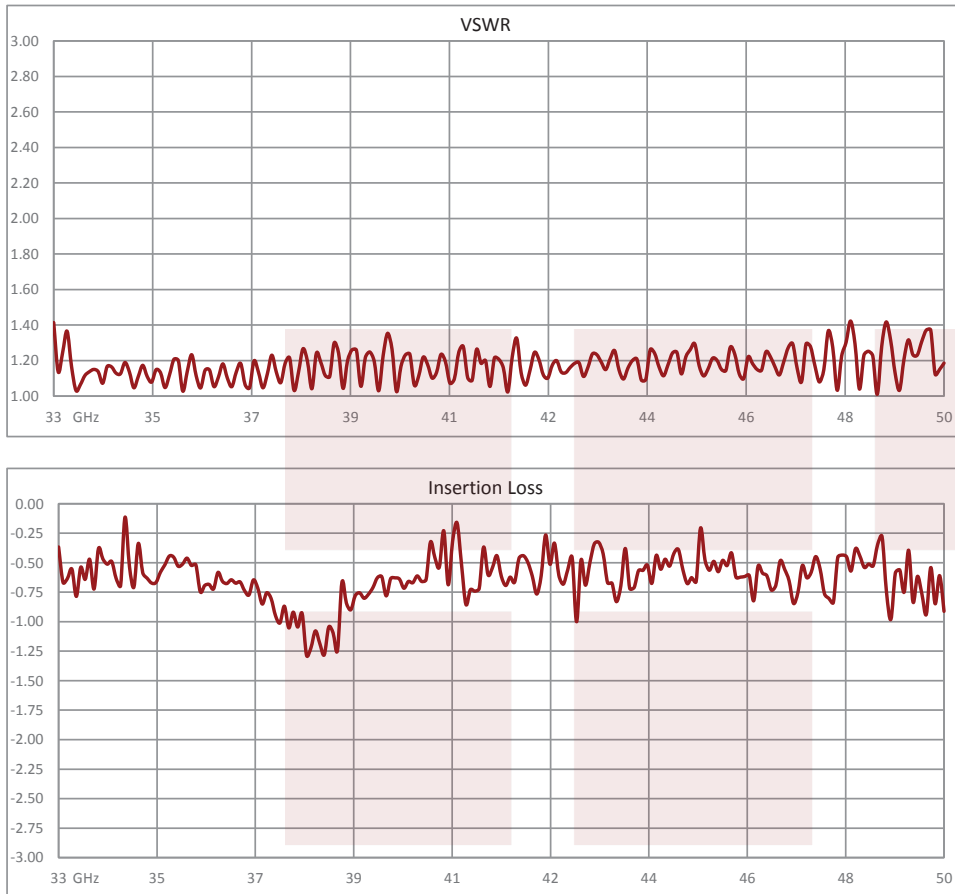
- Twelve inch long WR-22 waveguide
- Twistable
- Flexes in both the E and H plane
- Neoprene sleeve allows pressurization
- UG-383/U Round Cover Flange
- Q Band
- 33 GHz to 50 GHz Frequency Range
- Brass flanges with a silver plated brass body

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

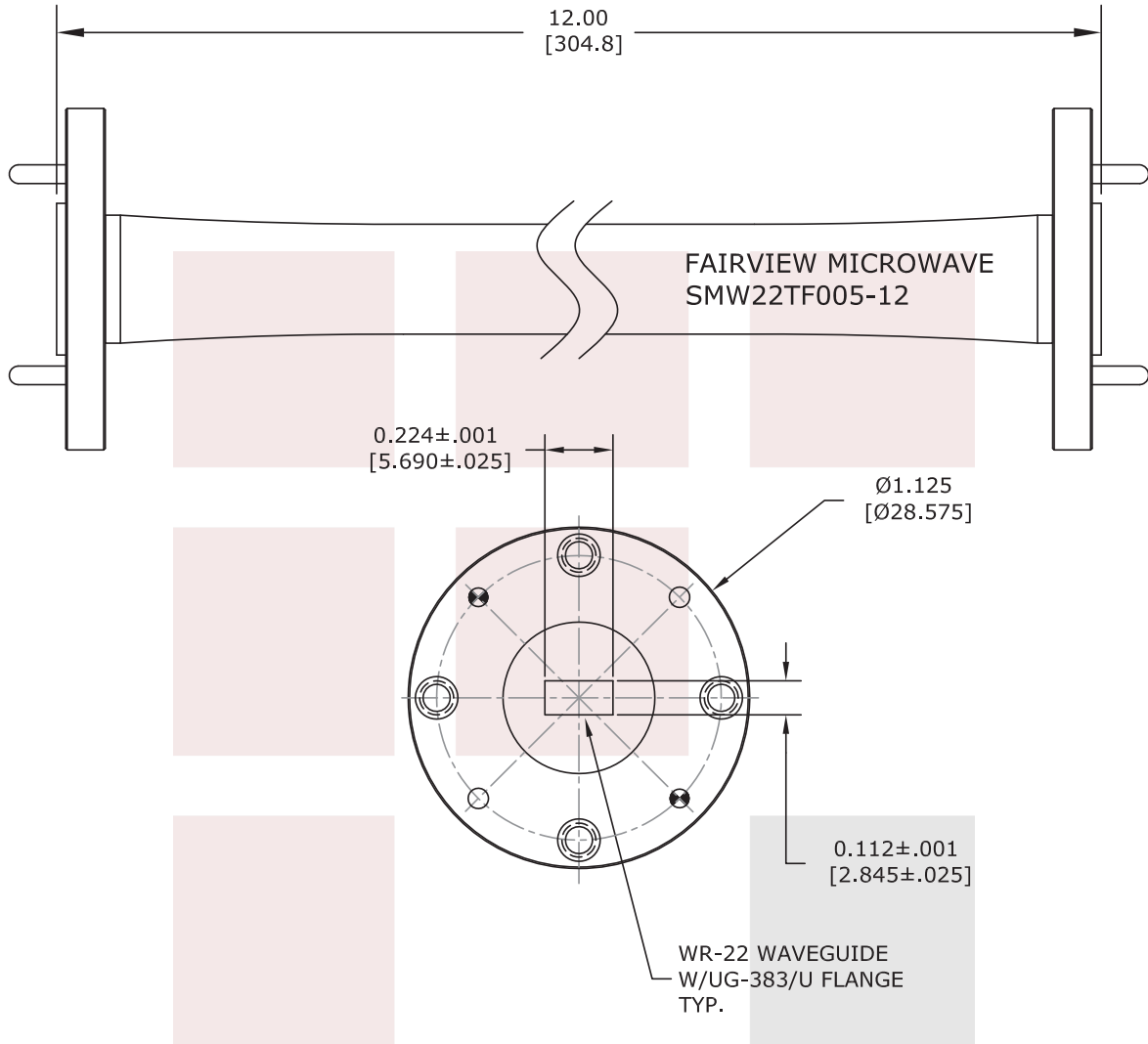


WR-22 Twistable Flexible Waveguide in 12 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-22 Twistable Flexible Waveguide in 12 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range SMW22TF005-12](#)

URL: <https://www.fairviewmicrowave.com/wr-22-twistable-flexible-waveguide-ug383-round-33-50-ghz-smw22tf005-12-p.aspx>

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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 12 Inch Using UG-383/U Round Cover Flange With a 33 GHz to 50 GHz Frequency Range		DWG NO SMW22TF005-12		CAGE CODE 3FKR5	
CAD FILE	012017	SHEET	SCALE	N/A	SIZE A 2233