



## WR-22 Twistable Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz

### Flexible Waveguides Technical Data Sheet

PE-W22TF005-12

#### 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

#### Description

The PE-W22TF005-12 is part of Pasternack'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	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
VSWR		1.3:1		
Insertion Loss		0.6		dB
Input Power			25	Watts
Peak Power			12	kWatts

#### 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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Twistable Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz PE-W22TF005-12](#)



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Round Cover Flange Operating from 33 GHz to 50 GHz

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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

**Environmental Specifications**

**Temperature**

Operating Range

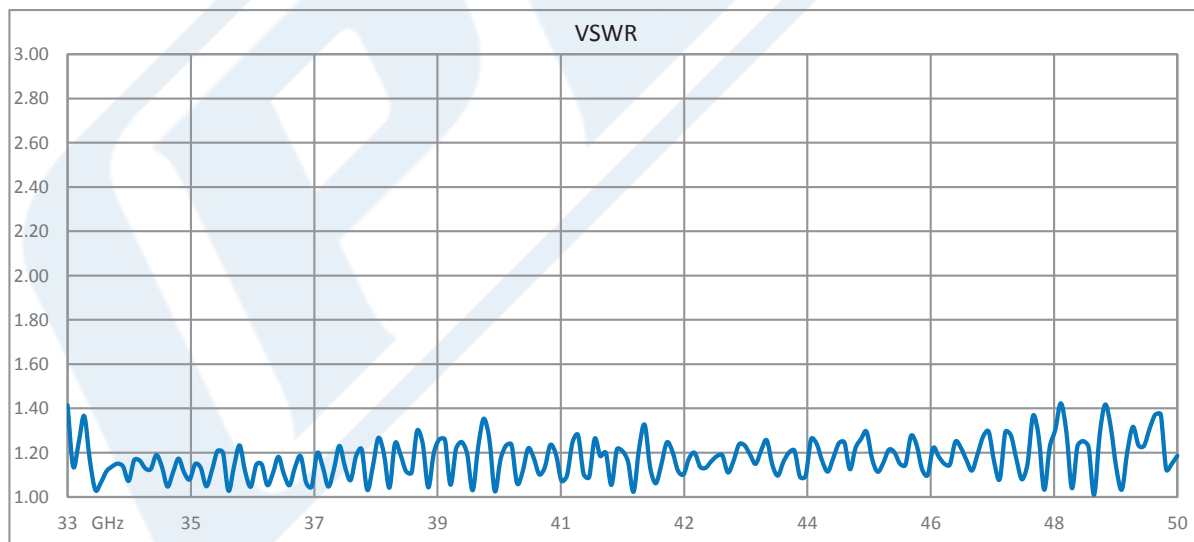
-50 to 100 deg C

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



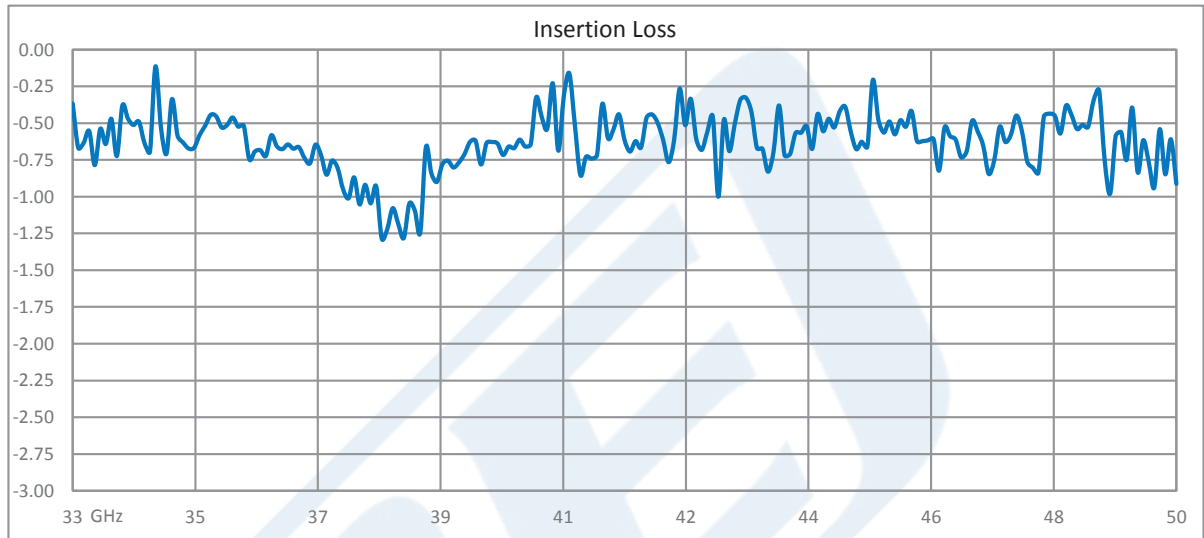
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WR-22 Twistable Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

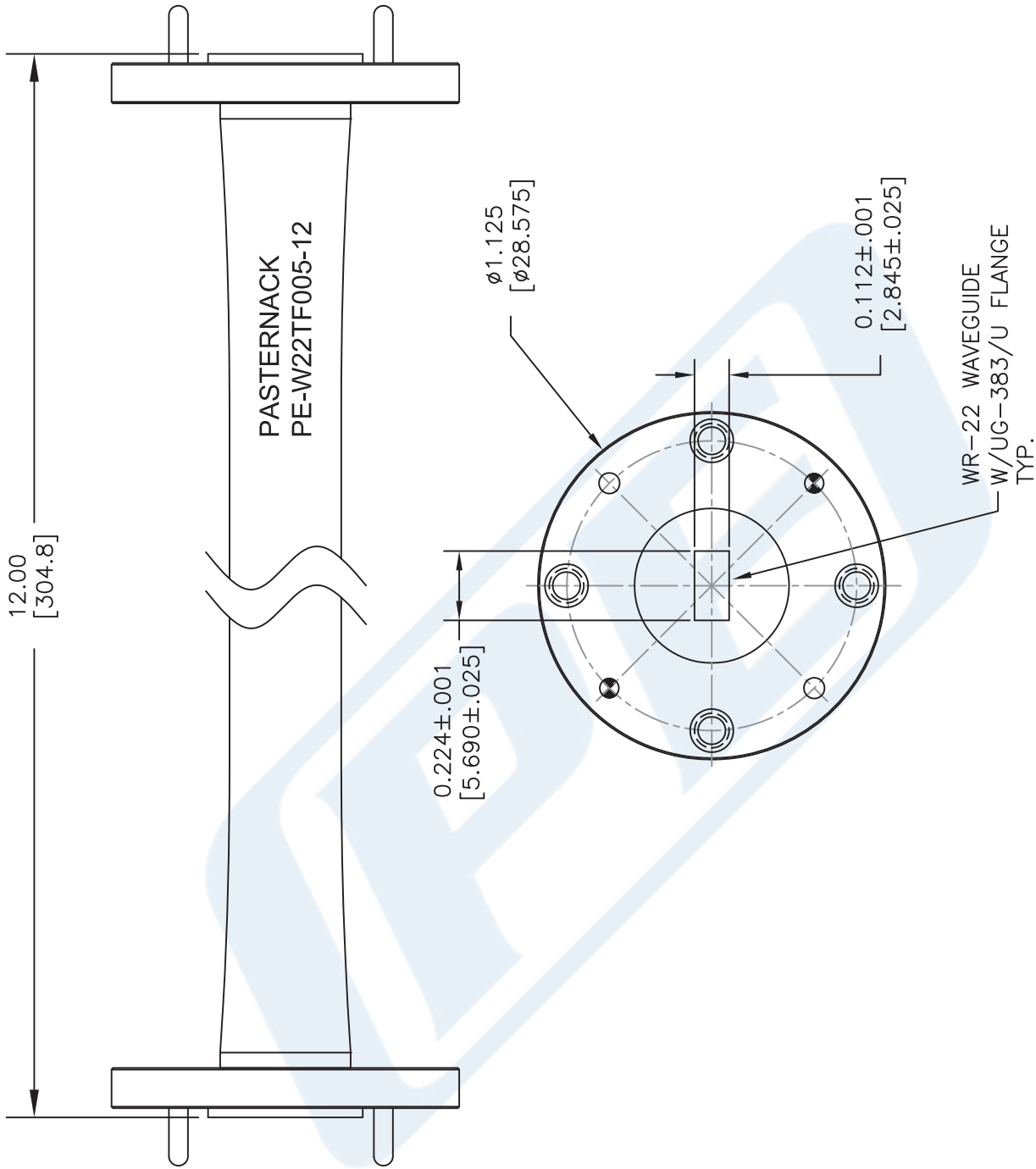
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Twistable Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz PE-W22TF005-12](https://www.pasternack.com/wr22-twistable-flexible-waveguide-ug383-round-33-50-ghz-pe-w22tf005-12-p.aspx)

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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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE-W22TF005-12 CAD Drawing

WR-22 Twistable Flexible Waveguide 12 Inch, UG-383/U Round  
Cover Flange Operating from 33 GHz to 50 GHz



UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN: inches [mm]  
TOLERANCES ARE:

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

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

DWG TITLE

**PE-W22TF005-12**

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].

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SCALE N/A

SIZE A

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