



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

### Flexible Waveguides Technical Data Sheet

PE-W22SF005-12

#### Features

- WR-22 waveguide
- Flexes in both the E and H plane
- UG-383/U Round Cover Flange
- Q Band
- 33 GHz to 50 GHz Frequency Range
- Brass flanges with a brass body
- Neoprene sleeve provides added protection and mechanical support

#### Applications

- Allows expansion/contraction due to thermal issues.
- Test Benches
- Microwave Radio
- Eliminates installation problems caused by misalignment.
- Pressurized waveguide systems
- Provides vibration isolation

#### Description

The PE-W22SF005-12 is part of Pasternack's family of flexible, seamless waveguides which operates in the 33 to 50 GHz Q Band range. The flexible waveguide section is made of brass. It can be 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		1.2:1		
Insertion Loss		0.49		dB
Input Power			100	Watts
Peak Power			12	kWatts

#### Mechanical Specifications

Waveguide Size	WR-22
Waveguide Design	Seamless
Section Length	12 [in [304.8 mm]]
E-Plane Minimum Bend Radius, One Time	0.39 in [9.91 mm]
H-Plane Minimum Bend Radius, One Time	0.59 in [14.99 mm]
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 Seamless Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz PE-W22SF005-12](#)



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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
Color	Gold	Black	Gold

**Environmental Specifications**

**Temperature**

Operating Range

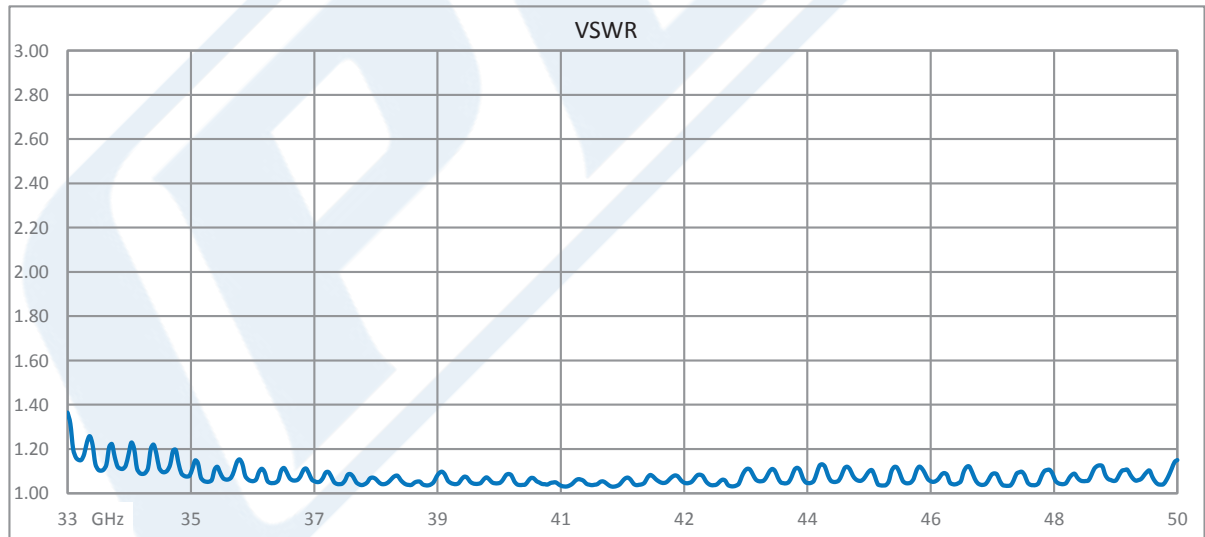
-50 to 100 deg C

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



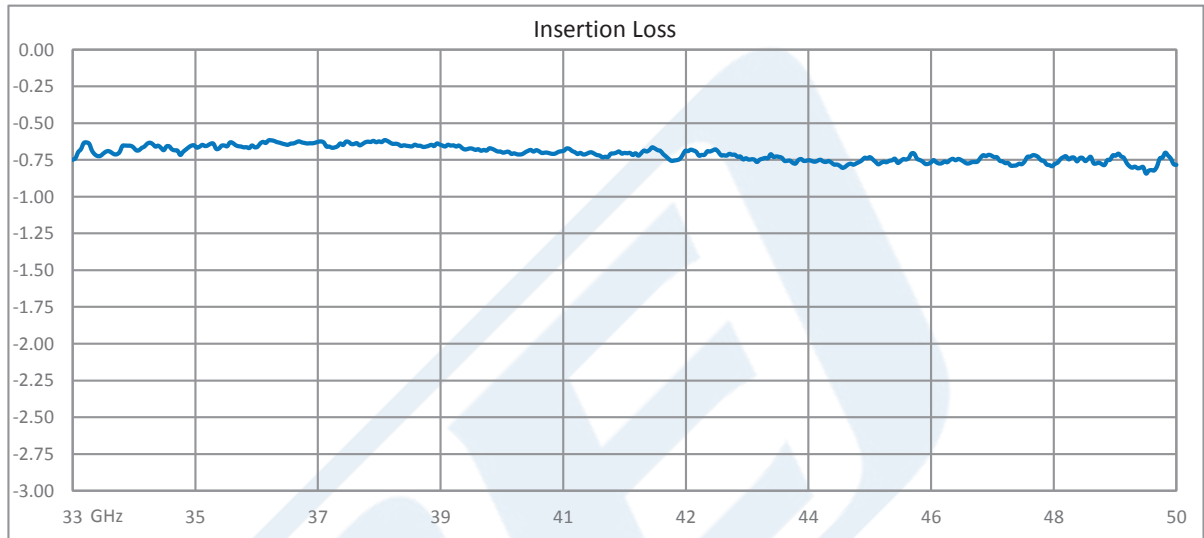
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Seamless Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz PE-W22SF005-12](#)



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

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WR-22 Seamless 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.

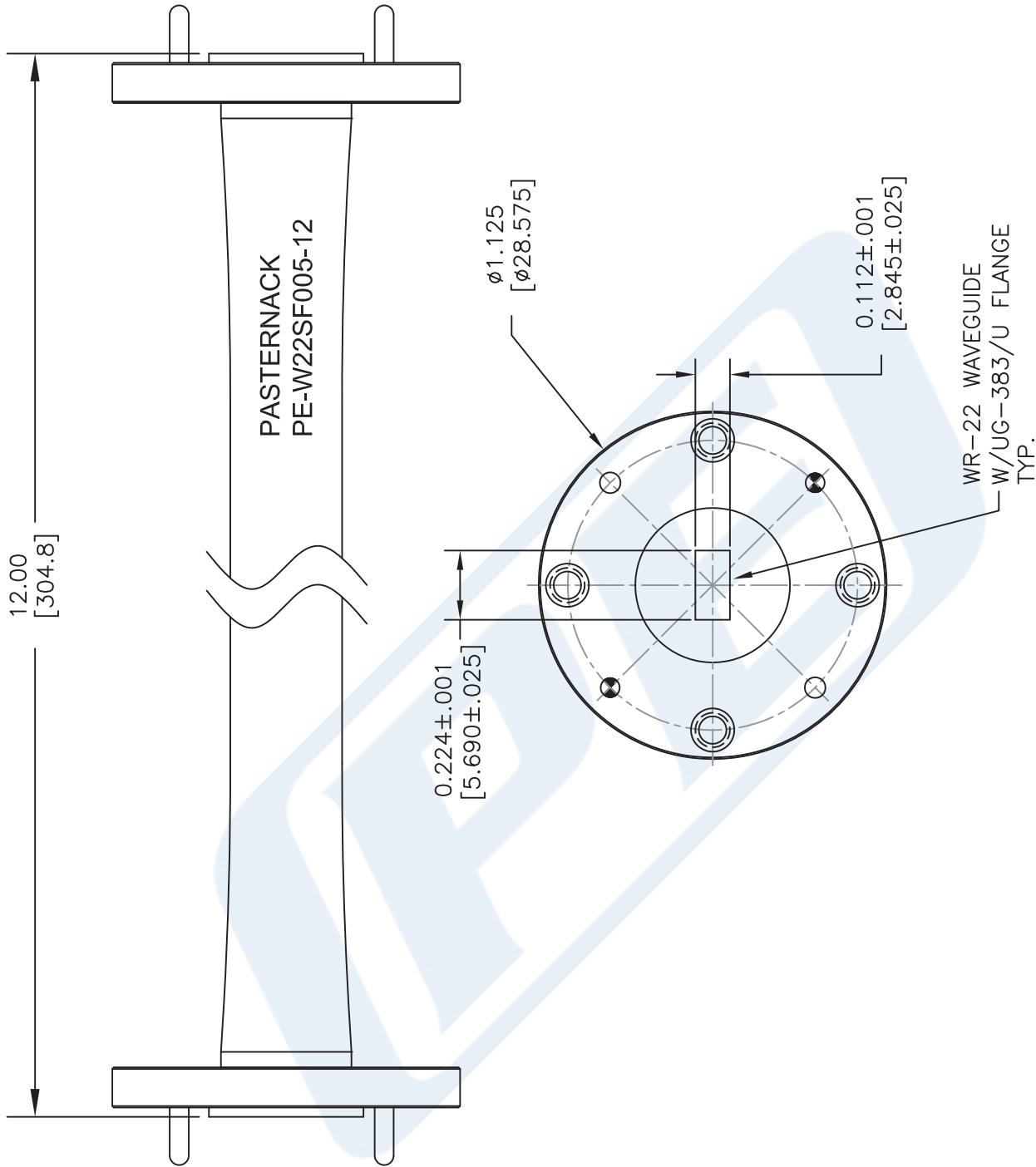
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Seamless Flexible Waveguide 12 Inch, UG-383/U Round Cover Flange Operating from 33 GHz to 50 GHz PE-W22SF005-12](https://www.pasternack.com/wr22-seamless-flexible-waveguide-ug383-round-33-50-ghz-pe-w22sf005-12-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-W22SF005-12 CAD Drawing

WR-22 Seamless 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°DEG.	± 1/32
.XX ±.015		
.XXX ±.005		

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

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE  
Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

**PE-W22SF005-12**

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].

CAGE CODE 53919

CAD FILE 010617

SCALE N/A

SIZE A

2233