



WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial

## Waveguide Direct Read Attenuators Technical Data Sheet

PE-W22AT5001

### Features

- WR-22
- 33 to 50 GHz
- 0 to 50 dB minimum attenuation range
- Stable base with height adjustable feet (1/2 inch)
- UG-383/U Flange
- 1.15:1 Maximum VSWR
- 2% attenuation accuracy over most of the attenuation range.
- 0.4 Watt Maximum Power
- Easy to read drum scale

### Applications

- Instrumentation
- System Calibration
- Research and Development
- Test Benches

### Description

The PE-W22AT5001 is a continuously variable attenuator that has "direct read" capability which allows the user to dial-in the amount of attenuation needed to within 2% accuracy over most of the attenuation range. Designed for the WR-22 frequency range (33 to 50 GHz), it is constructed using a precision rotary resistive vane in a circular waveguide. The attenuation level is stable, highly repeatable and accurate across the full frequency and attenuation range. This attenuator is ideal for precision measurements in demanding applications like instrumentation and system calibration.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
Attenuation	0		50	dB
Accuracy		±2	±4	%
VSWR			1.15:1	
Insertion Loss			0.6	dB
Input Power (CW)			0.4	Watts

### Attenuation Accuracy

Description	F1	F2	F3	F4	F5	Units
Attenuation Setting	10	20	30	40	50	dB
Accuracy	±0.2	±0.4	±0.6	±1.6	±2	dB

#### Electrical Specification Notes:

Attenuation Accuracy is 0.1 dB or 2% of reading, whichever is greater, to 40 dB and 4% of reading from 40 dB to 50 dB. Maximum attenuation setting is 60 dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial PE-W22AT5001](#)



WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial

## Waveguide Direct Read Attenuators Technical Data

PE-W22AT5001

### Mechanical Specifications

#### Size

Length	4.75 in [120.65 mm]
Width	6.25 in [158.75 mm]
Weight	3.148 lbs [1.43 Kg]
Tuner Body Material and Plating	Aluminum
Tuner Finish	Black

Description	Flange 1	Waveguide	Flange 2
Designation	UG-383/U	WR-22	UG-383/U
Type	Round Cover		Round Cover
Material	Brass	Brass	Brass
Plating	Gold	Gold	Gold
Plating Specification	ASTMB488	ASTMB488	ASTMB488
Finish	Gold	Gold	Gold

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial PE-W22AT5001](#)

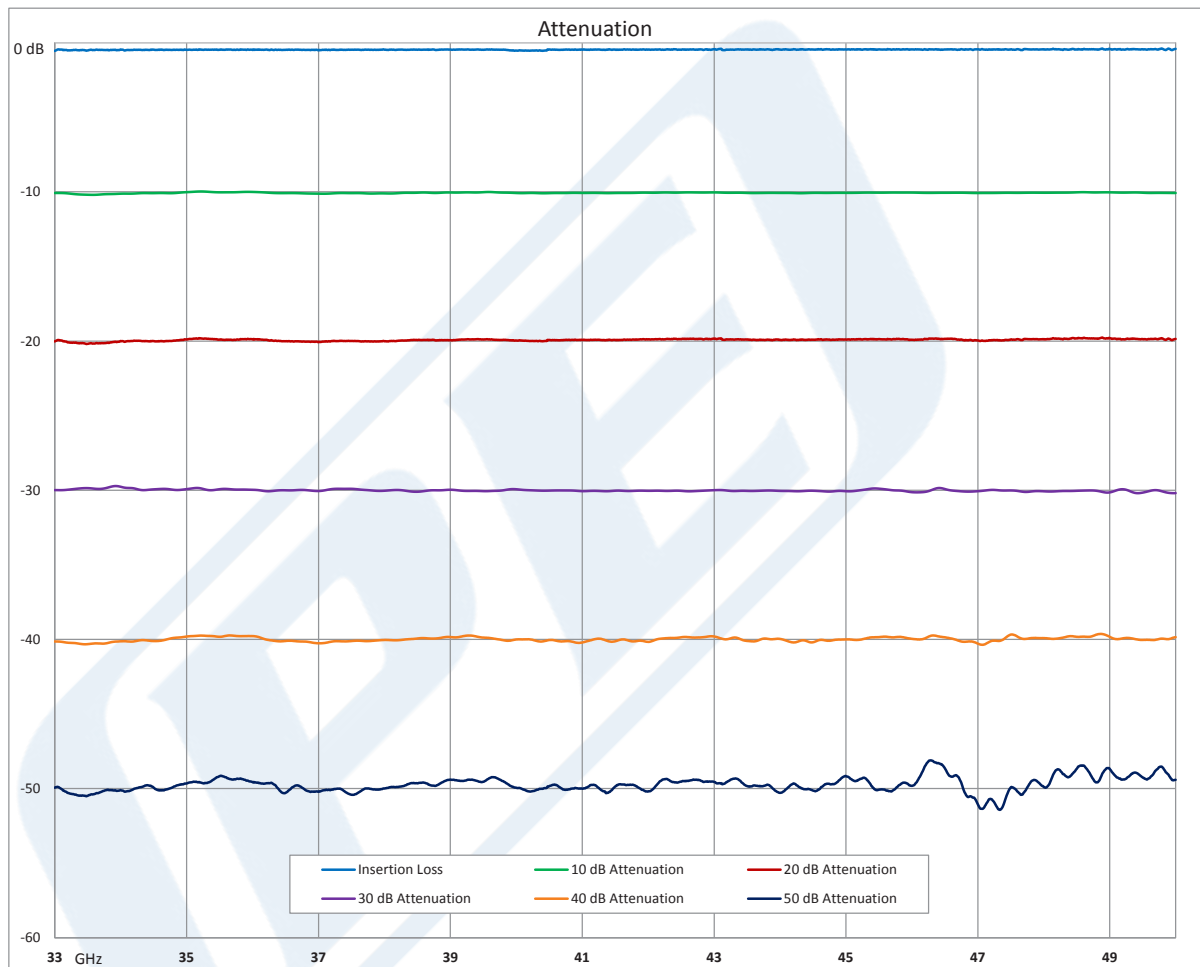


WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From  
33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial

## Waveguide Direct Read Attenuators Technical Data

PE-W22AT5001

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 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial PE-W22AT5001](#)



WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From  
33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial

## Waveguide Direct Read Attenuators Technical Data

PE-W22AT5001

WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial 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.

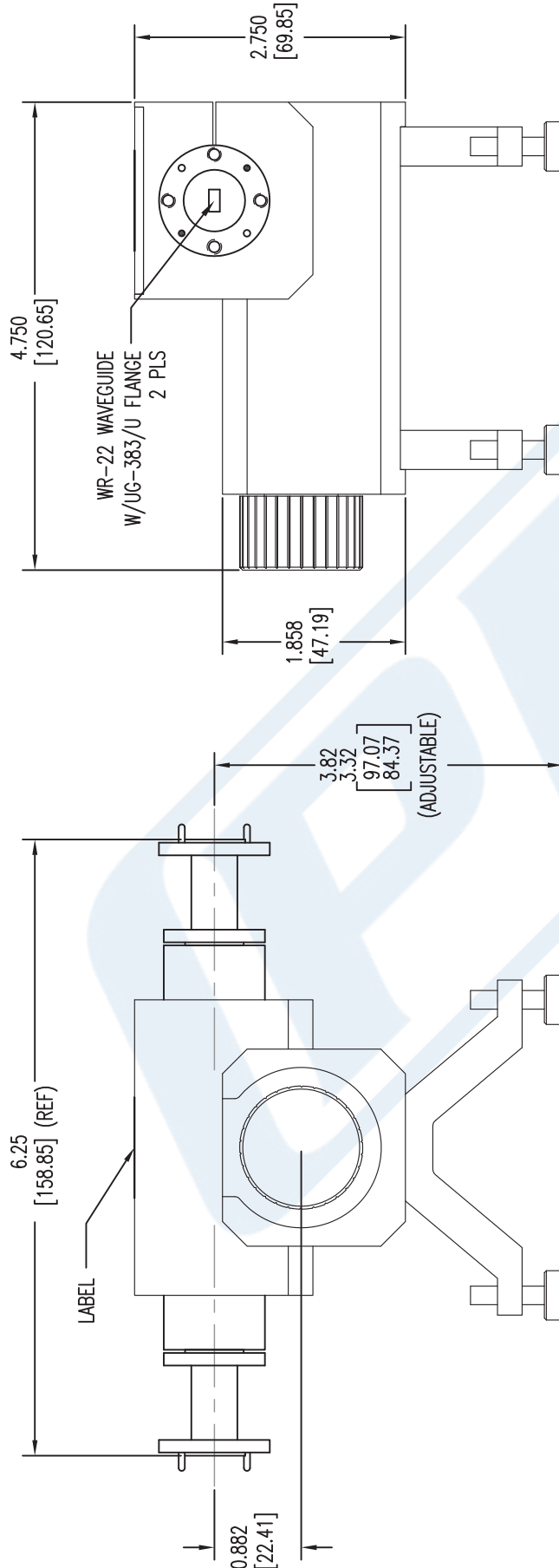
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From 33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial PE-W22AT5001](https://www.pasternack.com/50-db-waveguide-direct-read-attenuators-wr-22-50-ghz-pe-w22at5001-p.aspx)

URL: <https://www.pasternack.com/50-db-waveguide-direct-read-attenuators-wr-22-50-ghz-pe-w22at5001-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. 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-W22AT5001 CAD Drawing

WR-22 Waveguide Direct Read Attenuator, 0 to 50 dB, From  
33 GHz to 50 GHz, UG-383/U Round Cover Flange, Dial



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN: inches [mm]

TOLERANCES ARE:

.XX ± .10 [± 2.54]

.XXX ± .005 [± .127]

\* 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](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE

**PE-W22AT5001**

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].

FSCM NO. 53919

CAD FILE 011216

SCALE N/A

SIZE A

2233