

WR-22 Direct Read Waveguide Attenuator with
Dial 0 to 60 dB Operating from 33 GHz to
50 GHz, UG-383/U Round Cover Flange



SMW22AT5002

Features

- WR-22 Waveguide
- 33 to 50 GHz
- 0 to 60 dB 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.
- 0.5 Watt Maximum Power
- Easy to read drum scale

Applications

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

Description

The SMW22AT5002 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		60	dB
Accuracy		±0.1		
VSWR			1.15:1	
Insertion Loss		0.6		
Input Power, CW			0.5	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

Mechanical Specifications

Size

Length	4.75 in [120.65 mm]
Width	6.25 in [158.75 mm]
Height	0 in [0 mm]
Weight	45.83 lbs [20.79 kg]
Tuner Body Material and Plating	Aluminum
Tuner Finish	Black

WR-22 Direct Read Waveguide Attenuator with
Dial 0 to 60 dB Operating from 33 GHz to
50 GHz, UG-383/U Round Cover Flange



SMW22AT5002

Configuration

Connectors

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

Environmental Specifications

Temperature

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

Plotted and Other Data

Notes:

WR-22 Direct Read Waveguide Attenuator with Dial 0 to 60 dB Operating from 33 GHz to 50 GHz, UG-383/U Round Cover Flange 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

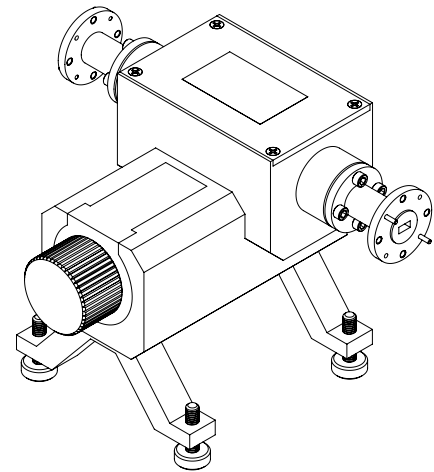
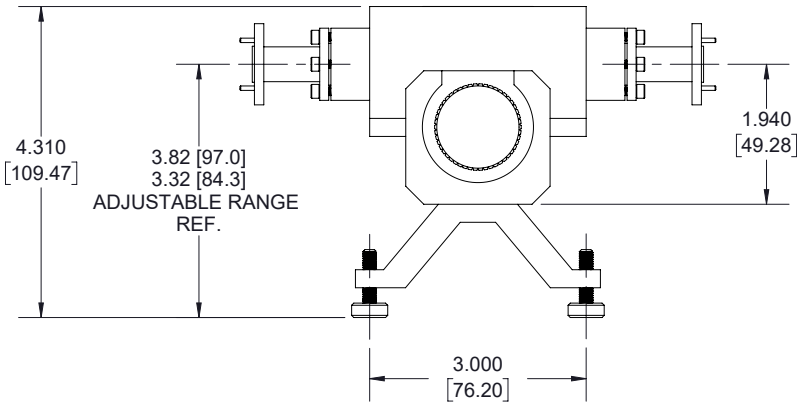
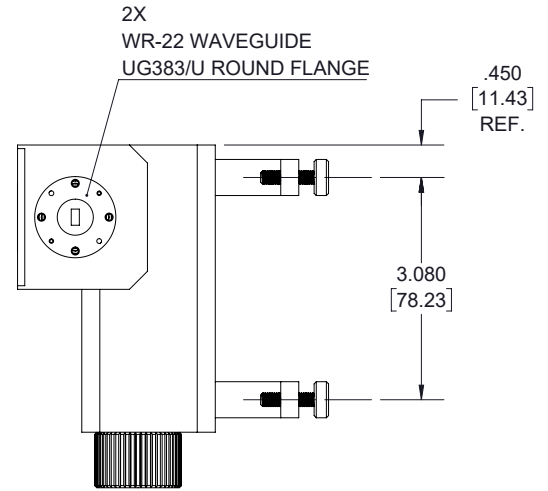
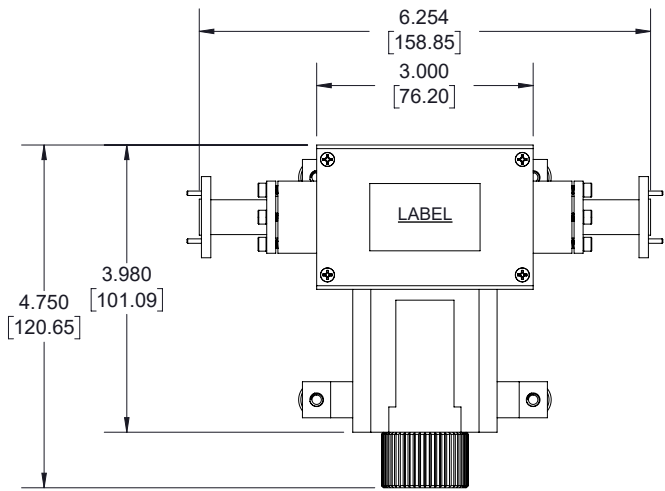
For additional information on this product, please click the following link: [WR-22 Direct Read Waveguide Attenuator with Dial 0 to 60 dB Operating from 33 GHz to 50 GHz, UG-383/U Round Cover Flange SMW22AT5002](#)

URL: <https://www.fairviewmicrowave.com/60-db-wr-22-waveguide-direct-read-attenuators-50-ghz-ug383-round-sm-w22at5002-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

SMW22AT5002 CAD Drawing

WR-22 Direct Read Waveguide Attenuator with Dial 0 to 60 dB Operating from 33 GHz to 50 GHz, UG-383/U Round Cover Flange



LABEL


FAIRVIEW MICROWAVE
SMW22AT5002
D/C: YYWW

STANDARD TOLERANCES

.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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].

 Fairview Microwave an INFINIT [®] brand	DWG NO SMW22AT5002		CAGE CODE 3FKR5			
	CAD FILE 08/27/19	SHEET 1 OF 1	SCALE N/A	SIZE A	7361	