

**0 to 50 dB WR-12 Waveguide Direct Read Attenuator
 From 60 GHz to 90 GHz, Dial UG-387/U Flange**

The SMW12AT5001 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-12 frequency range (60 to 90 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.



Features:

- WR-12
- 60 to 90 GHz
- 0 to 50 dB minimum attenuation range
- Stable base with height adjustable feet (1/2 inch)
- UG-387/U Flange
- 1.20:1 Maximum VSWR
- 2% attenuation accuracy over most of the attenuation range.
- 0.2 Watt Maximum Power
- Easy to read drum scale

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	60		90	GHz
Attenuation	0		50	dB
Accuracy		±2	±4	%
VSWR			1.2:1	
Insertion Loss			0.9	dB
Input Power (CW)			0.2	Watts

Attenuation Accuracy

Description	F1	F2	F3	F4	F5	Units
Atten. 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

Mechanical Specifications

Size

Length 4.77 in [121.16 mm]
 Width 3.86 in [98.04 mm]

Tuner Body Material & Plating Aluminum
 Tuner Finish Black

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Description	Flange 1	Waveguide	Flange 2
Interface	UG-387/U	WR-12	UG-387/U
Material	Brass	Brass	Brass
Plating	Gold	Gold	Gold
Plating Spec.	ASTMB488	ASTMB488	ASTMB488
Finish	Gold	Gold	Gold

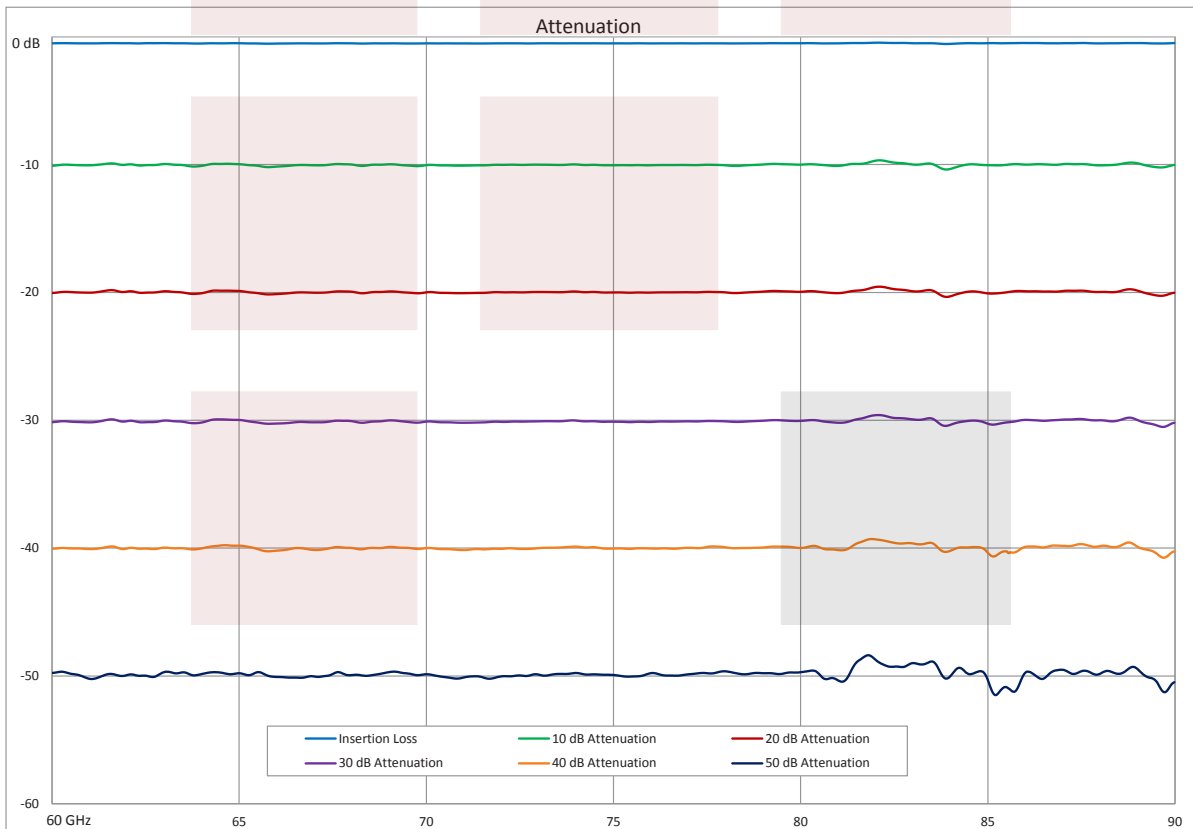
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
 REACH Compliant 06/14/2015

Plotted and Other Data

Notes:

Typical Performance Data



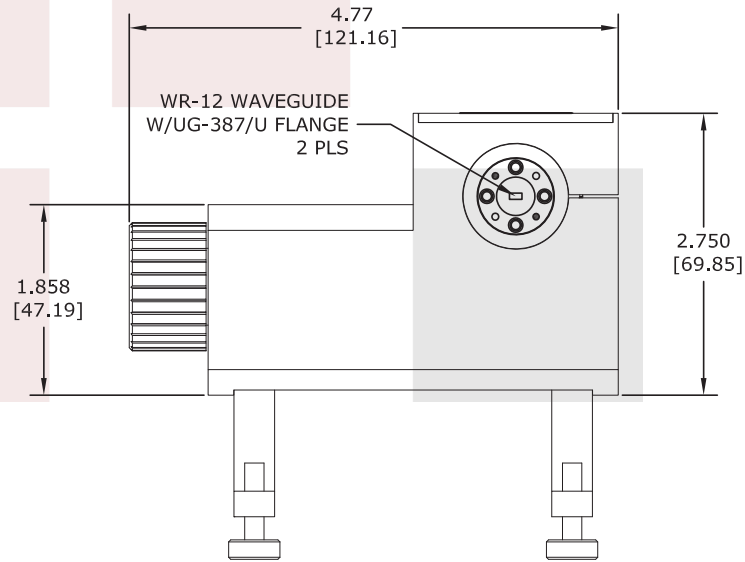
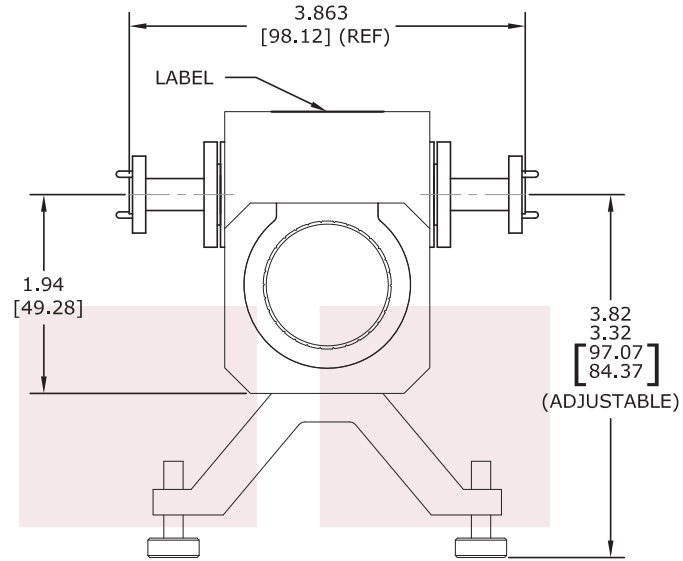
0 to 50 dB WR-12 Waveguide Direct Read Attenuator From 60 GHz to 90 GHz, Dial UG-387/U Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [0 to 50 dB WR-12 Waveguide Direct Read Attenuator From 60 GHz to 90 GHz, Dial UG-387/U Flange SMW12AT5001](#)

URL: <http://www.fairviewmicrowave.com/50-db-wr-12-waveguide-direct-read-attenuators-90-ghz-smw12at5001-p.aspx>

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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.

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 0 to 50 dB WR-12 Waveguide Direct Read Attenuator From 60 GHz to 90 GHz, Dial UG-387/U Flange		DWG NO SMW12AT5001		CAGE CODE 3FKR5	
CAD FILE	120415	SHEET	SCALE	N/A	SIZE A 2233