

WR-12 Waveguide Fixed Attenuator, 10 dB,  
Operating from 60 GHz to 90 GHz, UG-387/U Round  
Cover Flange, Rated to 0.1 Watt



## FMWAT1020-10

### Features

- WR-12 Waveguide
- Typical Attenuation 10 dB
- Frequency Range 60 GHz to 90 GHz
- UG-385/U cover Flanges
- VSWR 1.25:1 Max
- 2 Watts (CW) Max Power Handling

### Applications

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

### Description

FMWAT1020-10 is a WR-12 waveguide attenuator with 10 dB attenuation, operating in the 60 to 90 GHz frequency range. With typical VSWR performance of 1.25:1, the attenuator uses an UG-387/U cover flange that is made of gold plated brass. Fairview Microwave offers standard mid-band tuned Waveguide fixed attenuators with attenuation values from 3 to 30 dB. Waveguide fixed attenuators are part of Fairview Microwave's comprehensive waveguide product offerings which are available in stock and ready for same-day shipment.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	60		90	GHz
Nominal Attenuation		10		dB
Attenuation		0.7		dB
VSWR			1.25:1	
Input Power (CW)			0.1	Watts

### Mechanical Specifications

#### Size

Length	1.97 in [50.04 mm]
Width	0.75 in [19.05 mm]
Height	0.75 in [19.05 mm]
Weight	0.13 lbs [58.97 g]
Finish	Grey Paint

Description	Flange 1	Waveguide	Flange 2
Interface	UG-387/U	WR-12	UG-387/U
Material	Brass Copper	Brass Copper	Brass Copper
Plating	Gold	Gold	Gold

### Environmental Specifications

#### Temperature

Operating Range	-40 to +70 deg C
Storage Range	-55 to +85 deg C

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

### Plotted and Other Data

Notes:

WR-12 Waveguide Fixed Attenuator, 10 dB, Operating from 60 GHz to 90 GHz, UG-387/U Round Cover Flange, Rated to 0.1 Watt 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.

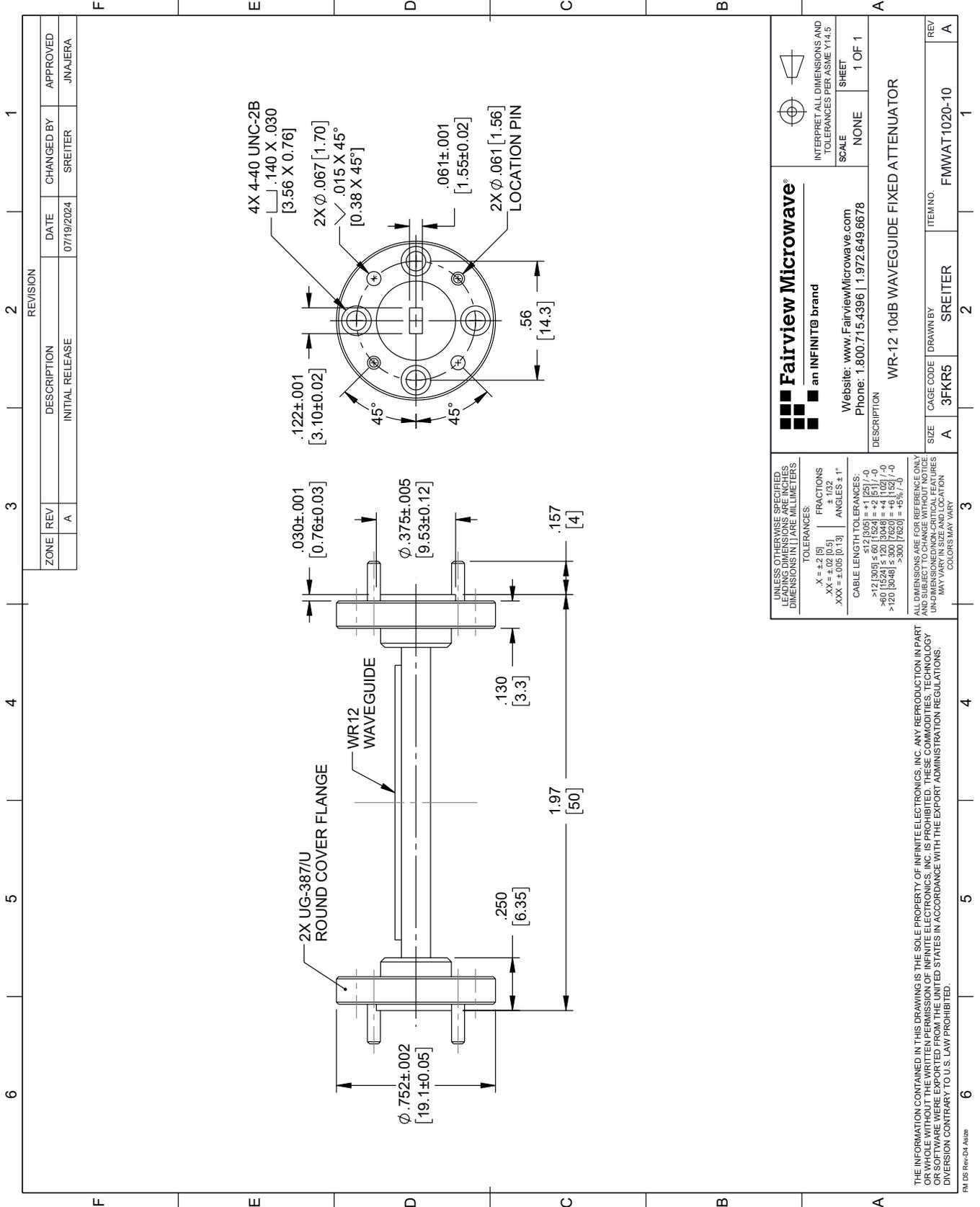
For additional information on this product, please click the following link: [WR-12 Waveguide Fixed Attenuator, 10 dB, Operating from 60 GHz to 90 GHz, UG-387/U Round Cover Flange, Rated to 0.1 Watt FMWAT1020-10](#)

URL: <https://www.fairviewmicrowave.com/wr-12-waveguide-attenuator-fixed-10-db-operating-from-60-to-90-ghz-ug-387-u-flange-fmwat1020-10-p.aspx>

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# FMWAT1020-10 CAD Drawing

WR-12 Waveguide Fixed Attenuator, 10 dB, Operating from 60 GHz to 90 GHz, UG-387/U Round Cover Flange, Rated to 0.1 Watt



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	07/19/2024	SREITER	JNAJERA

**Fairview Microwave**  
an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE  
SHEET: 1 OF 1

DESCRIPTION: WR-12 10dB WAVEGUIDE FIXED ATTENUATOR

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	SREITER	FMWAT1020-10

REV: A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32  
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:  
 ≤ 12 [305] ± .60 [15.24] = ±.2 [5] / -0  
 > 12 [305] ≤ 60 [1524] = ±.4 [10.2] / -0  
 > 60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 > 120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNKNOWN DIMENSIONS/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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