

WR-90 Waveguide Fixed Attenuator,  
10 dB, Operating from 8.2 GHz to 12.4 GHz, UG-39/U Square Cover Flange, Rated to 2 Watt



## FMWAT1023-10

### Features

- WR-90 Waveguide
- Typical Attenuation 10 dB
- Frequency Range 8.2 GHz to 12.4 GHz
- UG-39/U Cover Flanges
- VSWR 1.25:1 Max
- 2 Watts (CW) Max Power Handling

### Applications

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

### Description

FMWAT1023-10 is a WR-90 waveguide attenuator with 10 dB attenuation, operating in the 8.2 to 12.4 GHz frequency range. With typical VSWR performance of 1.25:1, the attenuator uses an UG-39/U cover flange that is made of 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	8.2		12.4	GHz
Nominal Attenuation		10		dB
Attenuation		0.7		dB
VSWR			1.25:1	
Input Power (CW)			2	Watts

### Mechanical Specifications

#### Size

Length	4.92 in [124.97 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	0.5 lbs [226.8 g]
Finish	Grey Paint

Description	Flange 1	Waveguide	Flange 2
Interface	UG-39/U	WR-90	UG-39/U
Material	Brass Copper	Brass Copper	Brass Copper
Plating	Passivated	Passivated	Passivated

### 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-90 Waveguide Fixed Attenuator, 10 dB, Operating from 8.2 GHz to 12.4 GHz, UG-39/U Square Cover Flange, Rated to 2 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.

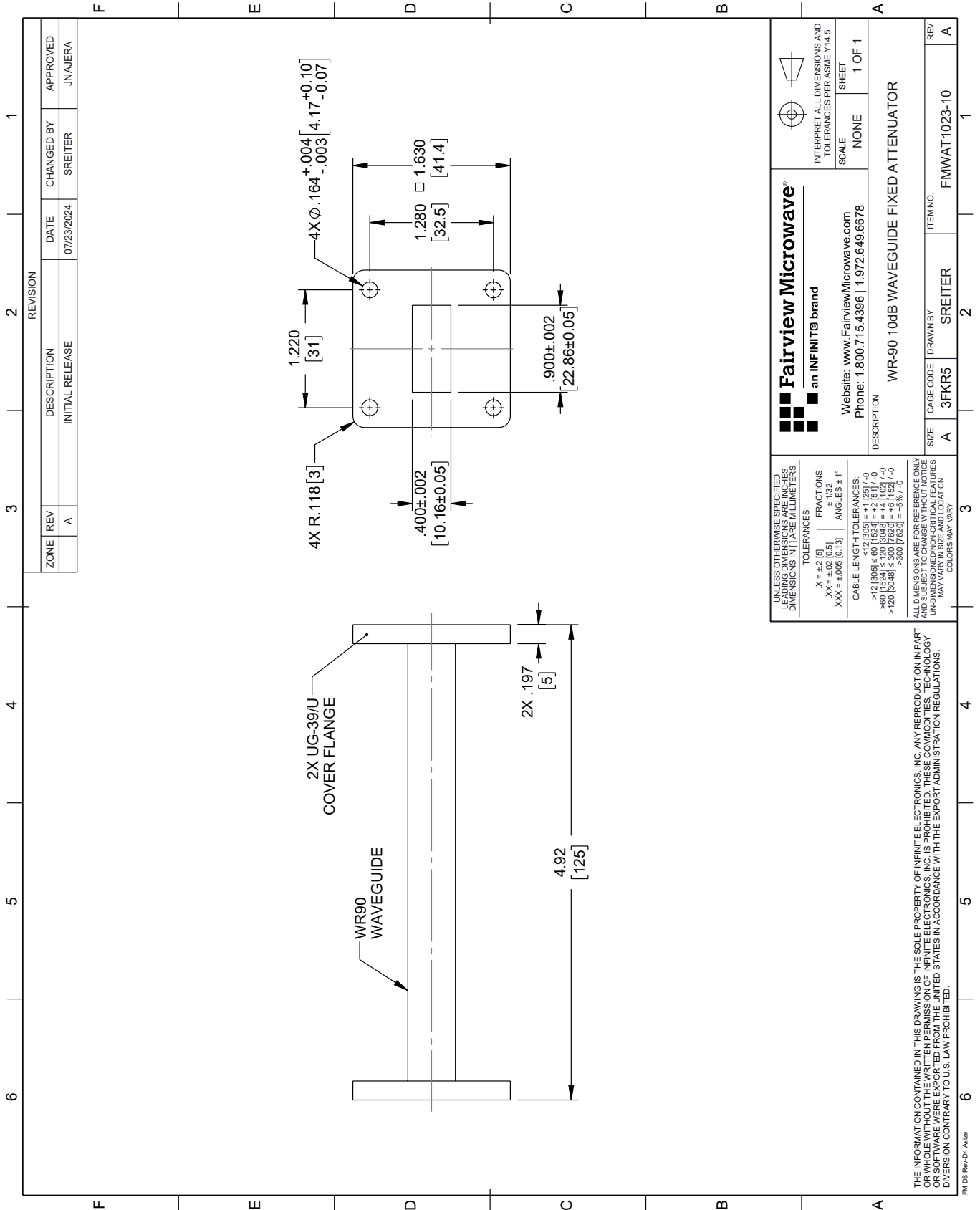
For additional information on this product, please click the following link: [WR-90 Waveguide Fixed Attenuator, 10 dB, Operating from 8.2 GHz to 12.4 GHz, UG-39/U Square Cover Flange, Rated to 2 Watt FMWAT1023-10](#)

URL: <https://www.fairviewmicrowave.com/wr-90-waveguide-attenuator-fixed-10-db-operating-from-8.2-to-12.4-ghz-ug-39-u-square-cover-flange-fmwat1023-10-p.aspx>

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# FMWAT1023-10 CAD Drawing

WR-90 Waveguide Fixed Attenuator, 10 dB, Operating from 8.2 GHz to 12.4 GHz, UG-39/U Square Cover Flange, Rated to 2 Watt



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	07/23/2024	SREITER	JNAJERA

 <b>Fairview Microwave</b> an INFINIT® brand		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678		SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: WR-90 10dB WAVEGUIDE FIXED ATTENUATOR		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO.: FMWAT1023-10
DRAWN BY: SREITER		REV: A

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

TOLERANCES:  
 .X = ±.2 [5]      FRACTIONS ± 1/32  
 .XX = ±.02 [0.5]      ANGLES ± 1°  
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
 ≤ 12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 > 60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 > 120 [3048] ≤ 300 [7620] = ±.8 [20.3] / -0

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

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