

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



FMWAT1023-20

Features

- WR-90 Waveguide
- Typical Attenuation 20 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

FMWAT1023-20 is a WR-90 waveguide attenuator with 20 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		20		dB
Attenuation		0.7		dB
VSWR			1.25:1	
Input Power (CW)			2	Watts

Mechanical Specifications

Size

Length	4.33 in [109.98 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	0.49 lbs [222.26 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, 20 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.

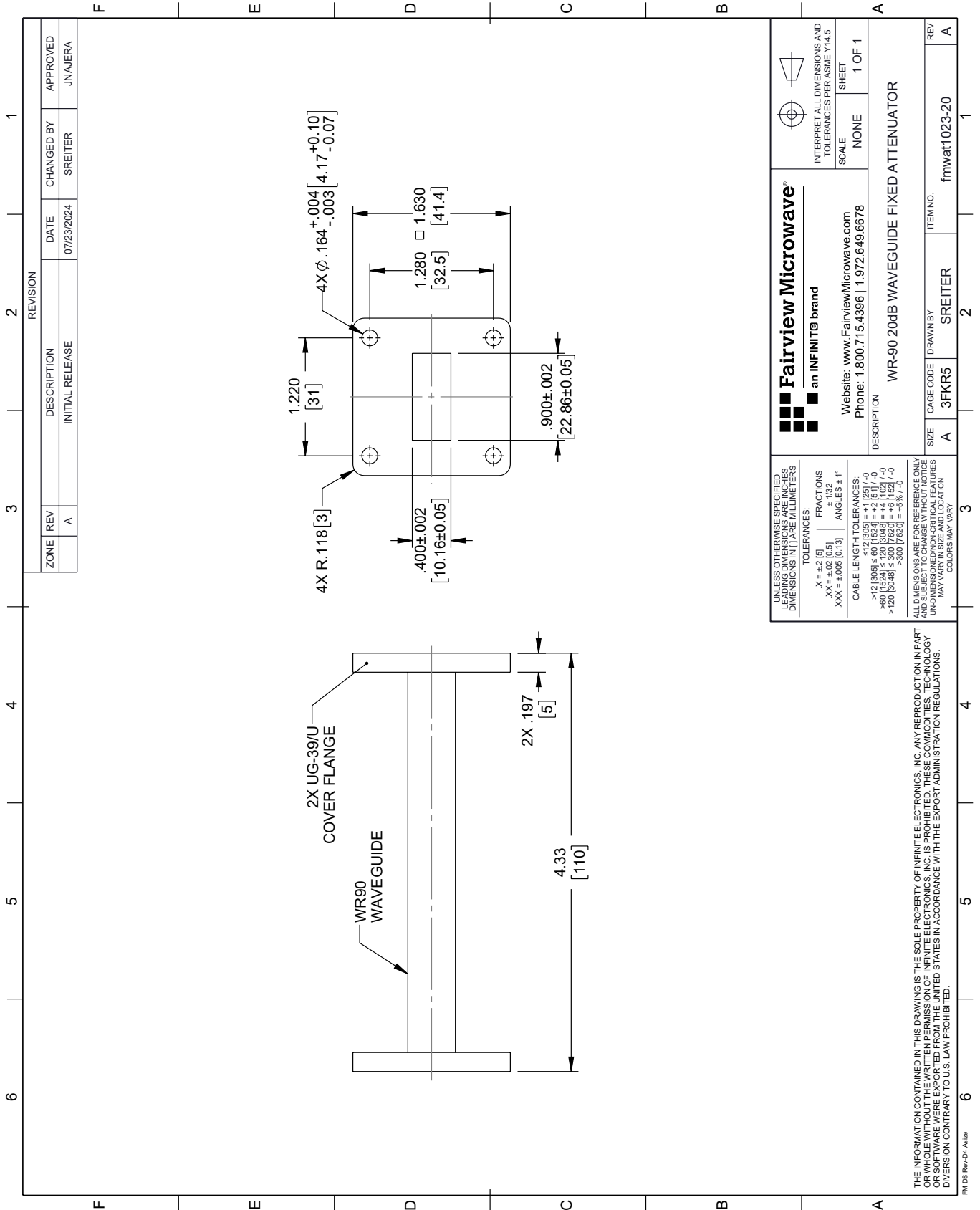
For additional information on this product, please click the following link: [WR-90 Waveguide Fixed Attenuator, 20 dB, Operating from 8.2 GHz to 12.4 GHz, UG-39/U Square Cover Flange, Rated to 2 Watt FMWAT1023-20](#)

URL: <https://www.fairviewmicrowave.com/wr-90-waveguide-attenuator-fixed-20-db-operating-from-8.2-to-12.4-ghz-ug-39-u-square-cover-flange-fmwat1023-20-p.aspx>

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FMWAT1023-20 CAD Drawing

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

 Fairview Microwave an INFINITI® brand		Website: 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-90 20dB WAVEGUIDE FIXED ATTENUATOR			
SIZE: A	CAGE CODE: 3FKR5	DRAWN BY: SREITER	ITEM NO: fmwat1023-20

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 [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 [15.24] / -0

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

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