

0 to 10 dB Variable Attenuator SMA Female to SMA
Female from 2 GHz to 4 GHz Rated to 5 Watts



FMAT7500-10

Features

- 10 dB Attenuation Level
- Rotary Dial Design for Continuous Adjustment Flat Across Frequency Range
- Frequency Range 2 GHz to 4 GHz
- SMA Female Connectorized Design
- Max VSWR 1.7:1
- Max Power Rating: 5W (CW)

Applications

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

Description

FMAT7500-10 from Fairview Microwave is a continuously variable attenuator that has 10 dB of total attenuation with rotary dial design for continuous attenuation level adjustment with +/- 1.5 dB flatness across a frequency Range from 2 GHz to 4 GHz. With SMA female connectors, this RF variable attenuator design is tried and true technology that offers exceptional RF performance characteristics that include 0.5 dB maximum insertion loss and a maximum VSWR of 1.7:1 and rated at 5 Watts (CW). Continuously variable attenuators are part of the comprehensive RF attenuator product offerings from Fairview Microwave which are available in stock and ready for same day shipment.

Configuration

Design: Continuously Variable Attenuator
Body Material and Plating: Aluminum

Electrical Specifications Values at 25°C, sea level

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		4	GHz
Impedance		50		Ohms
Attenuation Value		0 to 10		dB
Step Type		Dial		
Input Power (CW)			5	Watts
Peak Power			3	kWatts
Insertion Loss			0.5	dB
VSWR			1.7:1	

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	2 to 4					GHz
Attenuation Accuracy	1.5					dB

Mechanical Specifications

Temperature

Size

Length: 2 in [50.8 mm]

0 to 10 dB Variable Attenuator SMA Female to SMA
Female from 2 GHz to 4 GHz Rated to 5 Watts



FMAT7500-10

Width	1.25 in [31.75 mm]
Height	0.5 in [12.7 mm]
Weight	0.2 lbs [90.72 g]

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female

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

Plotted and Other Data

- Notes:
- Values at 25 °C, sea level

0 to 10 dB Variable Attenuator SMA Female to SMA Female from 2 GHz to 4 GHz Rated to 5 Watts 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.

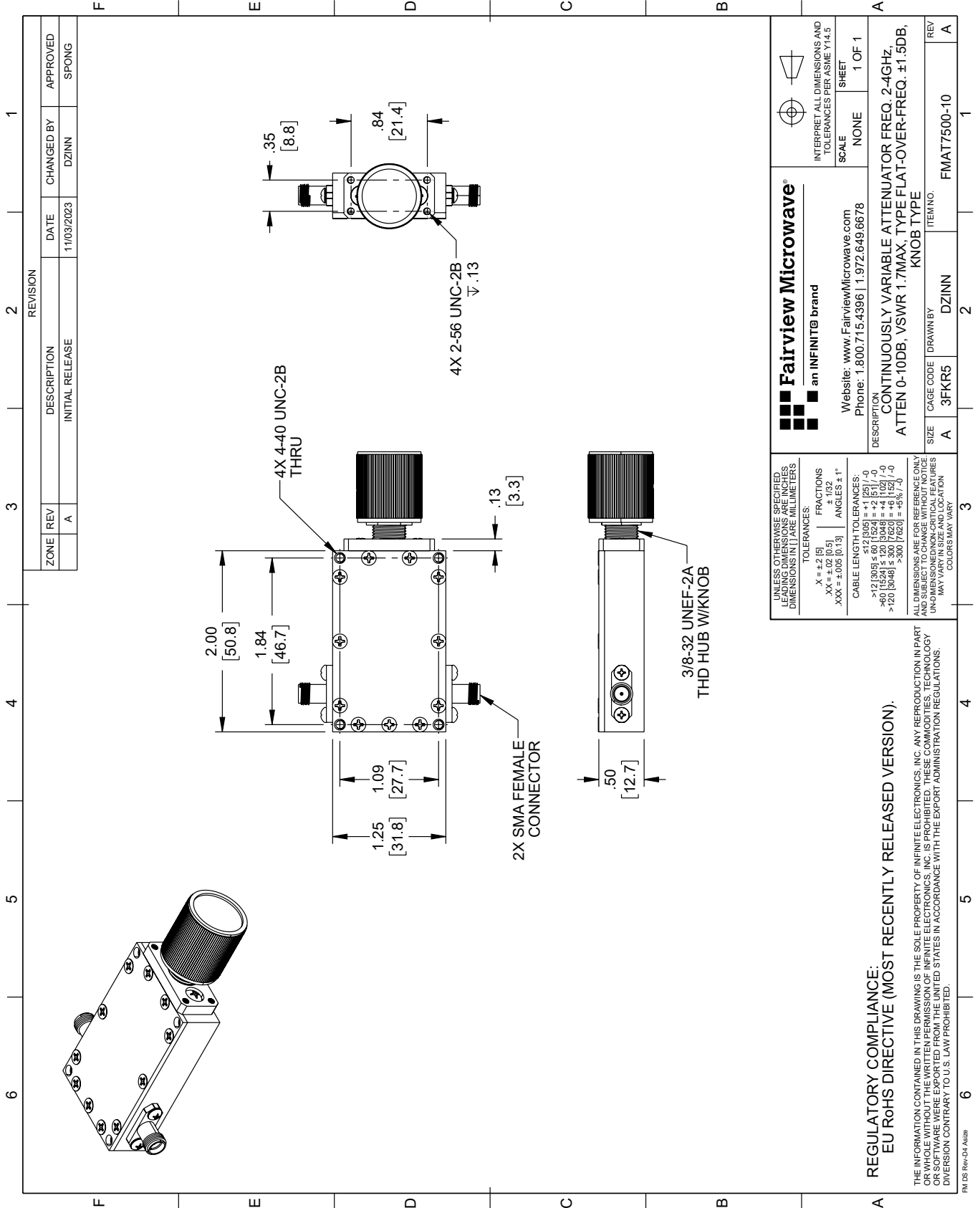
For additional information on this product, please click the following link: [0 to 10 dB Variable Attenuator SMA Female to SMA Female from 2 GHz to 4 GHz Rated to 5 Watts FMAT7500-10](#)

URL: <https://www.fairviewmicrowave.com/10db-continuously-variable-attenuator-sma-female-sma-female-5-watts-fmat7500-10-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.

FMAT7500-10 CAD Drawing

0 to 10 dB Variable Attenuator SMA Female to SMA Female from 2 GHz to 4 GHz Rated to 5 Watts



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
A	A	INITIAL RELEASE	11/03/2023	DZINN	SPONG

Fairview Microwave®
an INFINIT® brand

Website: www.FairviewMicrowave.com
Phone: 1.800.715.4396 | 1.972.649.6678

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. 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 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15] / -0

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

REGULATORY COMPLIANCE:
EU RoHS DIRECTIVE (MOST RECENTLY RELEASED VERSION).

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

PM DS Rev-D4 A426

REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
A	CONTINUOUSLY VARIABLE ATTENUATOR FREQ. 2-4GHZ. ATTEN 0-10DB, VSWR 1.7MAX, TYPE FLAT-OVER-FREQ. ±1.5DB, KNOB TYPE			

FAIRVIEW MICROWAVE	ITEM NO.	FMAT7500-10
SIZE	CAGE CODE	DZINN
A	3FKR5	
SCALE	NONE	
SHEET	1 OF 1	