

6 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR



FMAT7511-6

Features

- DC to 50 GHz Range
- Attenuation 6 ±1.1 dB
- 5 Watts Average Input Power
- VSWR <1.45:1

Applications

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

Description

Fairview Microwave carries a broad selection of fixed attenuators with a wide range of attenuation levels, frequency ranges, and power dissipation ranges. Also known as RF pads, RF microwave attenuators lower the amplitude of a signal (attenuate) a known amount. These attenuators pads can be used in a wide variety of applications including reducing a signal level to protect measurement equipment or other circuitry, extending the range of power meters and amplifiers, and impedance matching circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The FMAT7511-6 is a 6 dB Fixed Attenuators that operates from DC to 50 GHz and is rated to 5 Watts. The versatile coaxial package uses 2.4mm male to 2.4mm female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
Impedance		50		Ohms
Nominal Attenuation		6		dB
VSWR			1.45:1	
Input Power, CW			5	Watts
Derated linearly to 0.5W @ 125°C				
Input Power, Peak			200	Watts
5µs pulse, 2.5% duty cycle				

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 50					GHz
Attenuation Accuracy, Typ	1.1					dB

Mechanical Specifications

Size

Length	1.49606 in [38 mm]
Width/Diameter	1.14173 in [29 mm]
Height	1.14173 in [29 mm]
Weight	0.12 lbs [54.43 g]
Body Material and Plating	Aluminum

6 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR



FMAT7511-6

Configuration		
Design	Fixed, Bidirectional	
Connectors		
Description	Connector 1	Connector 2
Type	2.4mm Male	2.4mm Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Stainless Steel	Stainless Steel

Environmental Specifications

Temperature	
Operating Range	-55 to +125 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data

6 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR 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.

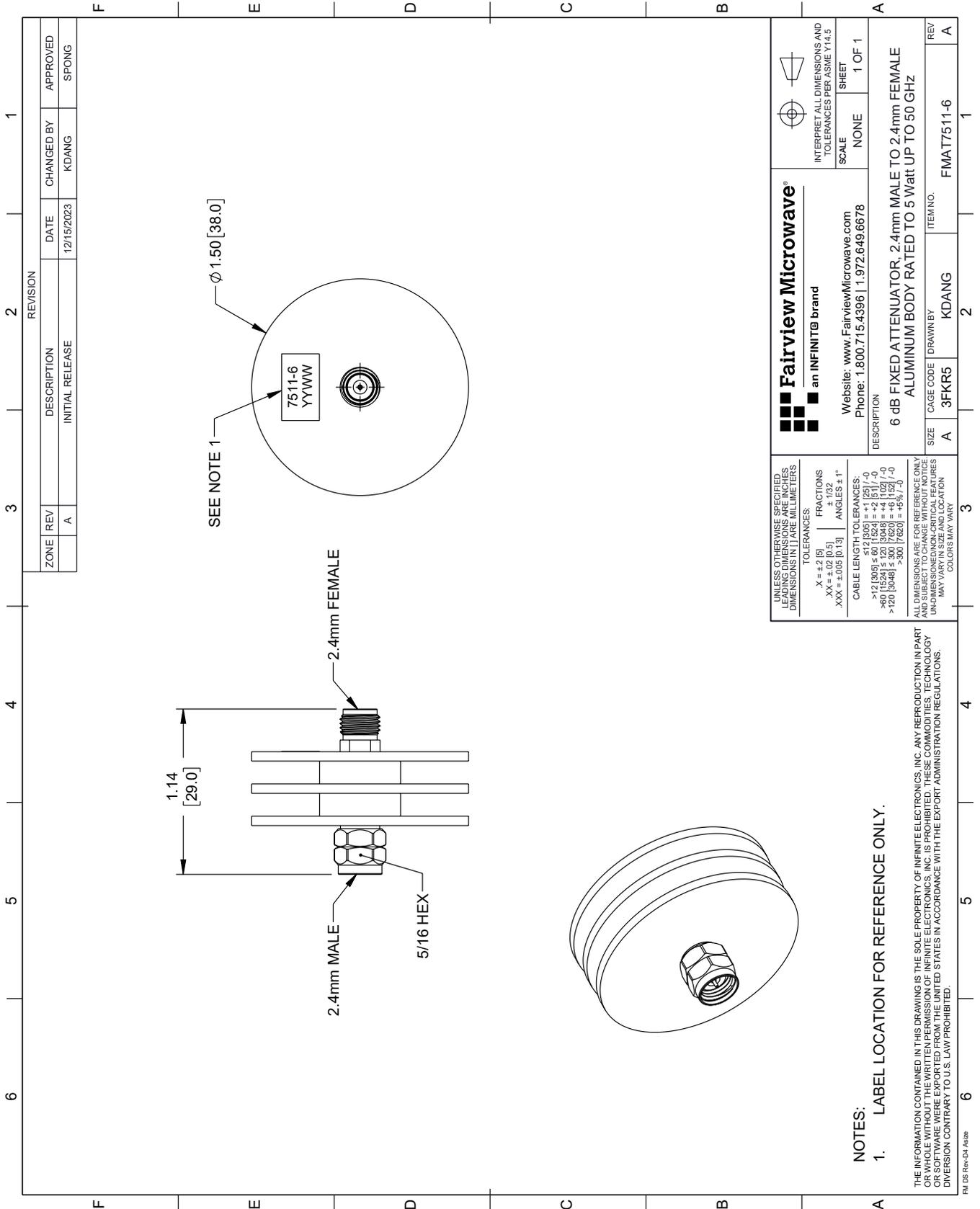
For additional information on this product, please click the following link: [6 dB Fixed Attenuator 2.4mm Male \(Plug\) to 2.4mm Female \(Jack\) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR FMAT7511-6](#)

URL: <https://www.fairviewmicrowave.com/6db-fixed-attenuator-2.4mm-male-2.4mm-female-5-watts-fmat7511-6-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.

FMAT7511-6 CAD Drawing

6 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) up to 50 GHz Rated to 5 Watts, Aluminum Body, 1.45:1 VSWR



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	12/15/2023	KDANG	SPONG

 Fairview Microwave an INFINIT® 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
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		DESCRIPTION 6 dB FIXED ATTENUATOR, 2.4mm MALE TO 2.4mm FEMALE ALUMINUM BODY RATED TO 5 Watt UP TO 50 GHz	REV A
TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS ± 1/32 ANGLES ± 1°	SIZE A
CABLE LENGTH TOLERANCES: <12 [305] ≤ 60 [1524] = ±.1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.	CAGE CODE 3FKR5
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		DRAWN BY KDANG	ITEM NO. FMAT7511-6

NOTES:
 1. LABEL LOCATION FOR REFERENCE ONLY.

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.

FM DS Rev-D4 Alt2b