0 to 10 dB Step Attenuator With a 1 dB Step BNC Female Connectors Rated Up To 2.2 GHz and Up to 2 Watts in a Rotary Design

# FMAT1024

### Features

- 1 dB steps from 0 to 10 dB Attenuation
- Rotary Dial Control
- ±0.4 dB Maximum Attenuation Accuracy

### Applications

#### Instrumentation

Precision Measurements

- BNC Female Connectors
- -20°C to +80°C Operating Temperature
- Prototyping and Characterization
- Production Systems

#### Description

The FMAT1024 is a Step Attenuator that has 10 dB of total attenuation with 1 dB step size and rotary dial design across a frequency range from DC to 2.2 GHz. The design is tried and true technology that offers exceptional performance characteristics that include 0.4 dB maximum insertion loss, and a maximum VSWR of 1.4:1 at 2.2 GHz. The design also features excellent attenuation accuracy with ±0.4 dB typical at 2.2 GHz. The Chem film Aluminum alloy package has BNC Female connectors, and operates within the temperature range of -20°C to 80°C.

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		2.2	GHz
Impedance		50		Ohms
Insertion Loss	0.4		dB	
Attenuation Value		0 to 10		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak			1	kWatts
1 µsec Pulse Width				

#### **Specifications by Frequency**

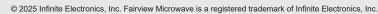
Description	F1	F2	F3	F4	F5	Units
Range	DC to 1	1 to 2.2				GHz
Insertion Loss	0.2	0.4				dB
VSWR	1.2:1	1.4:1				
Attenuation Accuracy	0.2	0.4				dB

#### **Mechanical Specifications**

SizeLength2 in [50.8 mm]Width1.5 in [38.1 mm]Height0 in [0 mm]Weight0.452 lbs [205.02 g]Body Material and PlatingAluminum, Chem Film







1.7

1.9

2.2

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Connectors

### Description **Connector 1 Connector 2 BNC** Female **BNC** Female Туре **Environmental Specifications** Temperature **Operating Range** -20 to 85 deg C Compliance Certifications (see product page for current document) **Plotted and Other Data** Notes: **Typical Performance Data** VSWR 3.0 2.8 2.6 2.4 2.2 2.0 1.8 1.6 1.4 1.2 1.0

1.1

1.4

2

0.0 GHz

0.3

0.6

0.8



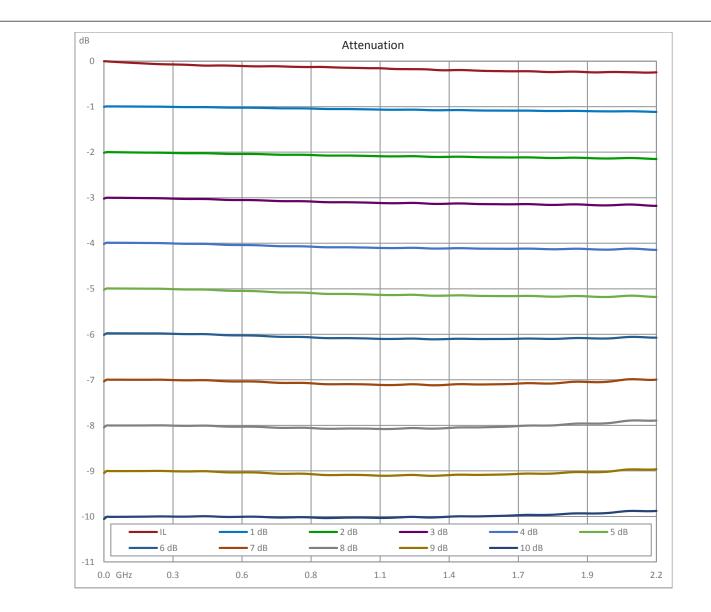




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## **FMAT1024**

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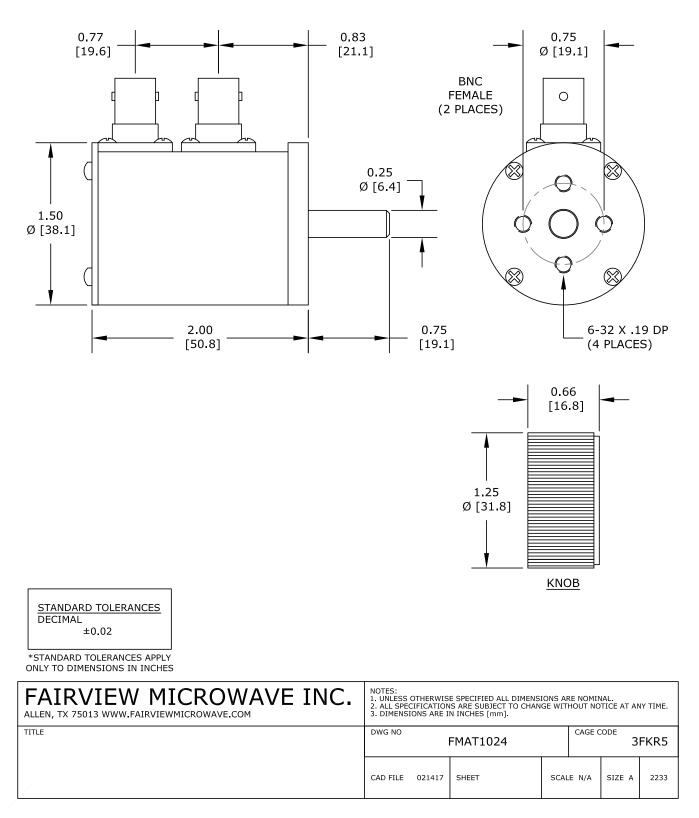
For additional information on this product, please click the following link: 0 to 10 dB Step Attenuator With a 1 dB Step BNC Female Connectors Rated Up To 2.2 GHz and Up to 2 Watts in a Rotary Design FMAT1024

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## FMAT1024 CAD Drawing

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