

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



FMAT1025

Features

- 1 dB steps from 0 to 10 dB Attenuation
- Rotary Dial Control
- ±0.4 dB Maximum Attenuation Accuracy
- SMA Female Connectors
- -20°C to +80°C Operating Temperature

Applications

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

Description

The FMAT1025 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 SMA 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 µsec Pulse Width			1	kWatts

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

Size

Length	2 in [50.8 mm]
Width	1.5 in [38.1 mm]
Height	0 in [0 mm]
Weight	0.4249 lbs [192.73 g]
Body Material and Plating	Aluminum, Chem Film

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female

Environmental Specifications

Temperature

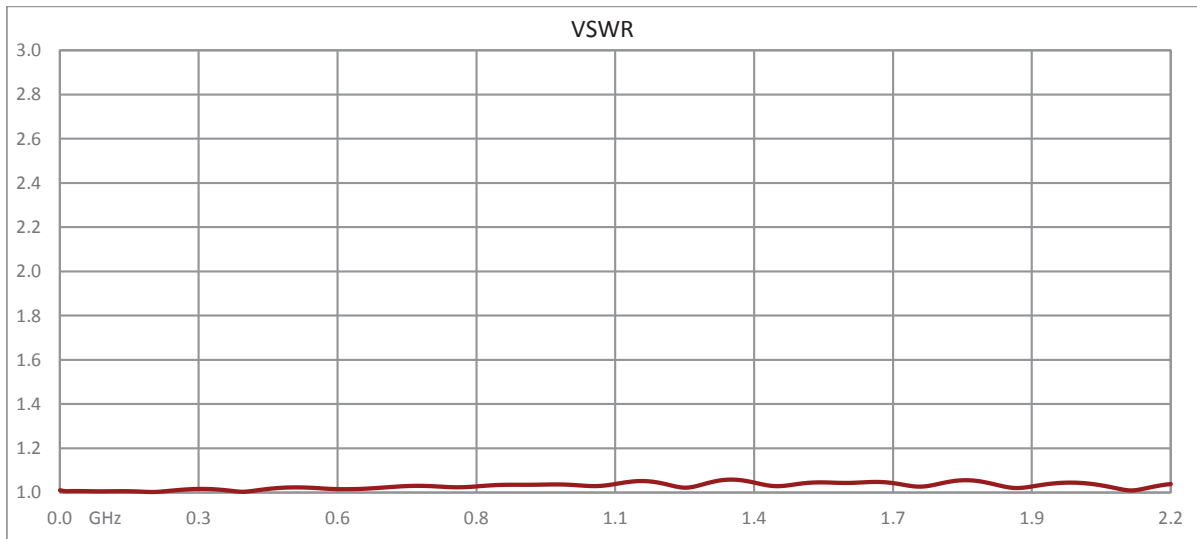
Operating Range -20 to 85 deg C

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

Plotted and Other Data

Notes:

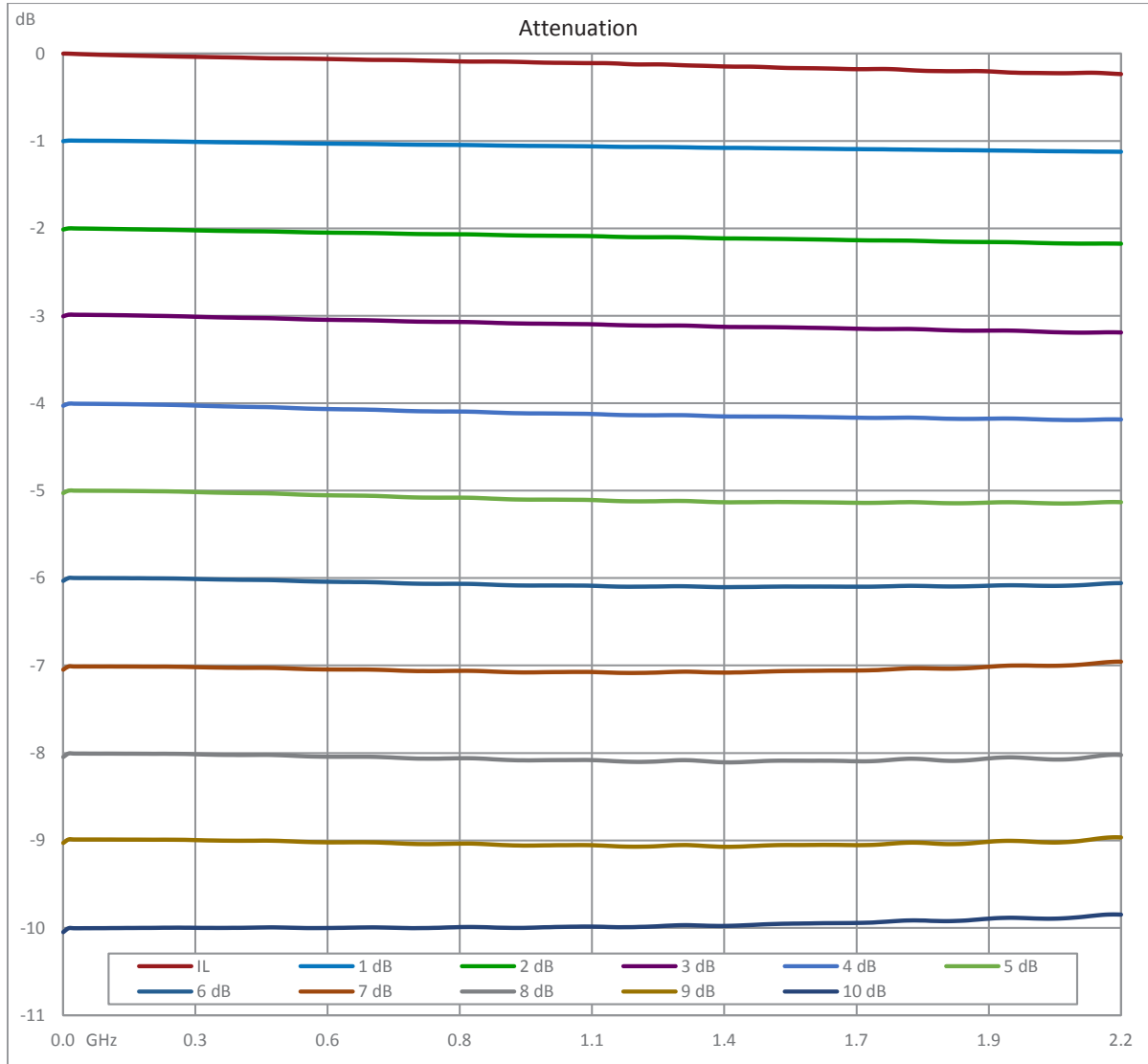
Typical Performance Data



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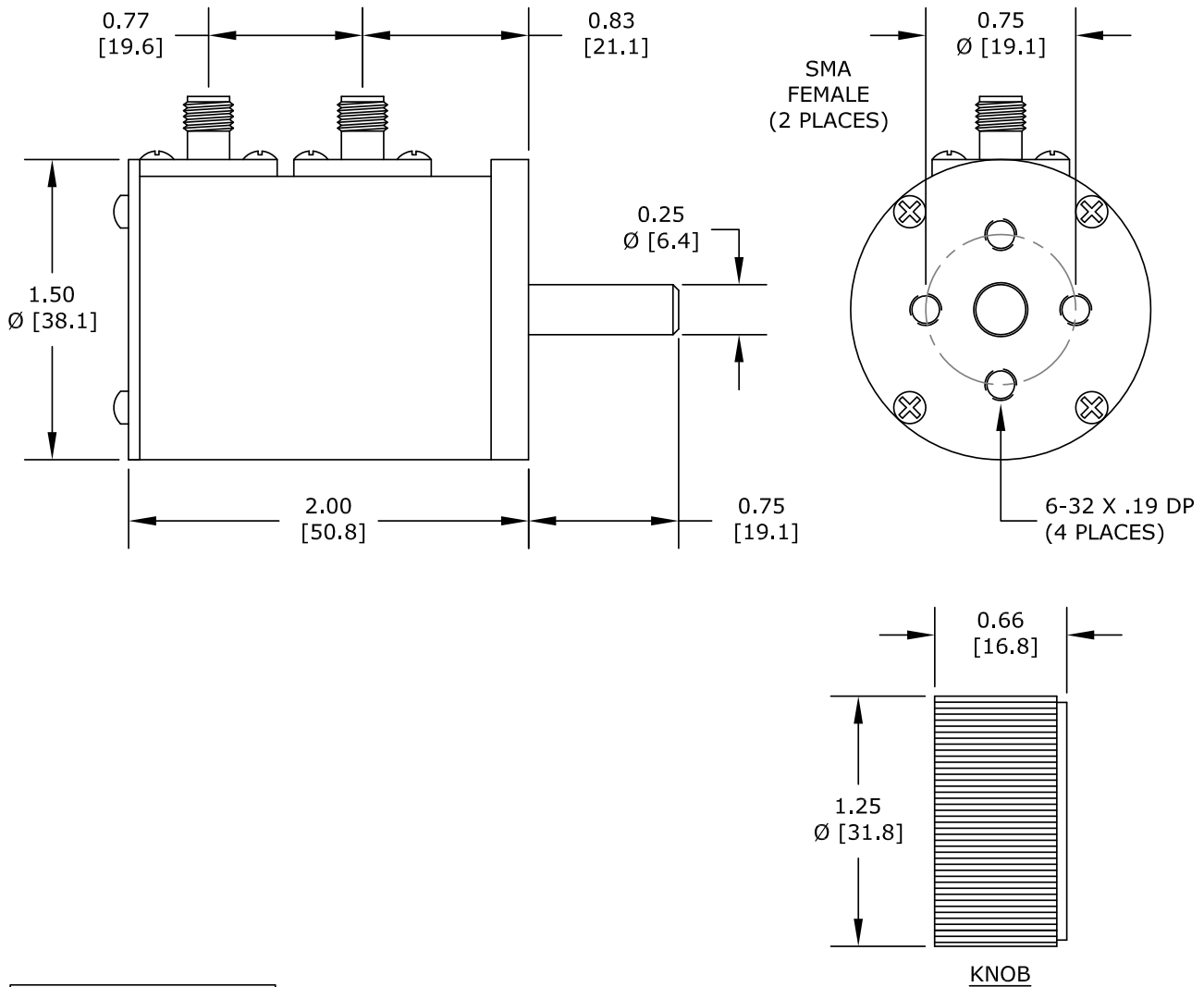
For additional information on this product, please click the following link: [0 to 10 dB Step Attenuator With a 1 dB Step SMA Female Connectors Rated Up To 2.2 GHz and Up to 2 Watts in a Rotary Design FMAT1025](#)

URL: <https://www.fairviewmicrowave.com/10db-step-attenuator-1db-sma-female-dc-2.2-ghz-2-watts-fmat1025-p.aspx>

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FMAT1025 CAD Drawing

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STANDARD TOLERANCES
 DECIMAL
 ±0.02

*STANDARD TOLERANCES APPLY
 ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC.		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		DWG NO FMAT1025		CAGE CODE 3FKR5	
TITLE		CAD FILE 021417	SHEET	SCALE N/A	SIZE A 2233