

0 to 99dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz



FMAT7444-99

Features

- 1 dB steps from 0 to 99 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- 0°C to +54°C Operating Temperature
- ±2 dB Typical Attenuation Accuracy

Applications

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

Description

The FMAT7444-99 is a Step Attenuator that has 99 dB of total attenuation with 1 dB step size and rotary dial design across a frequency range from DC to 18 GHz. The design is tried and true technology that offers exceptional performance characteristics that include 1.5 dB maximum insertion loss, and a maximum VSWR of 1.75:1 at 18 GHz. The design also features excellent attenuation accuracy with ±2 dB typical at 18 GHz. The Aluminum package has SMA Female connectors, and operates within the temperature range of 0°C to 54°C.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Attenuation Value		0 to 99		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5µs Pulse Width, 1% DutyCycle			200	Watts
VSWR			1.75:1	

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 18					GHz
Attenuation Accuracy	2					dB

Electrical Specification Notes:

Attenuation Accuracy specification is ±3.5% dB typ for any attenuation above 70dB.

Mechanical Specifications

Size

Length	6.417 in [162.99 mm]
Width	1.772 in [45.01 mm]
Height	1.89 in [48.01 mm]
Weight	2.5 lbs [1.13 kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Contact Material and Plating	Beryllium Copper, Gold	
Body Material and Plating	Stainless Steel	Aluminum

Environmental Specifications

Temperature

Operating Range 0 to 54 deg C

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

Plotted and Other Data

Notes:

0 to 99dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz 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 99dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz FMAT7444-99](#)

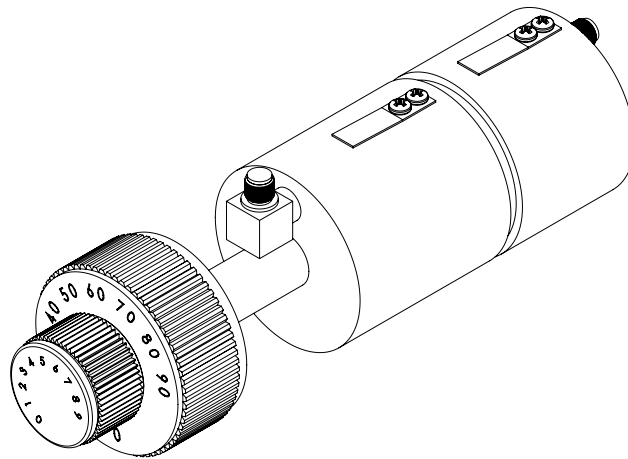
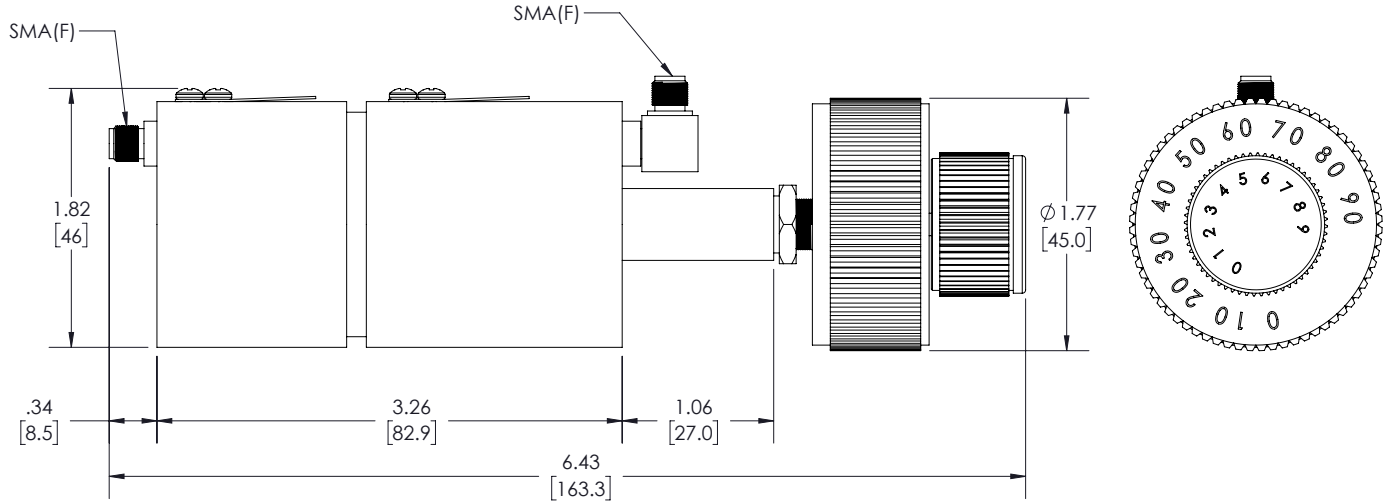
URL: <https://www.fairviewmicrowave.com/99db-step-attenuator-1db-sma-female-dc-18-ghz-2-watts-fmat7444-99-p.aspx>

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FMAT7444-99 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	05/19/2022	SPONG



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TITLE	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		
	TOLERANCES:	CABLE LENGTH (L) TOLERANCES:	
	.X = ±.2 [5.08] FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
	.XX = ±.02 [.51] ± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
	.XXX = ±.005 [.13] ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	
	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	PSRINIVAS	FMAT7444-99

THIRD-ANGLE PROJECTION	
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