

0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz

The FMAT7444-69 is a Step Attenuator that has 69 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 ± 1.5 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	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Attenuation Value		0 to 69		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5 μ s 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
Atten. Accuracy	± 1.5					dB

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	1.06 lbs [480.81 g]

Connectors

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

Environmental Specifications

Temperature

Operating Range	0 to 54 deg C
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Features:

- 1 dB steps from 0 to 69 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- 0°C to $+54^{\circ}\text{C}$ Operating Temperature
- ± 1.5 dB Typical Attenuation Accuracy

Applications:

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

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

Plotted and Other Data

Notes:

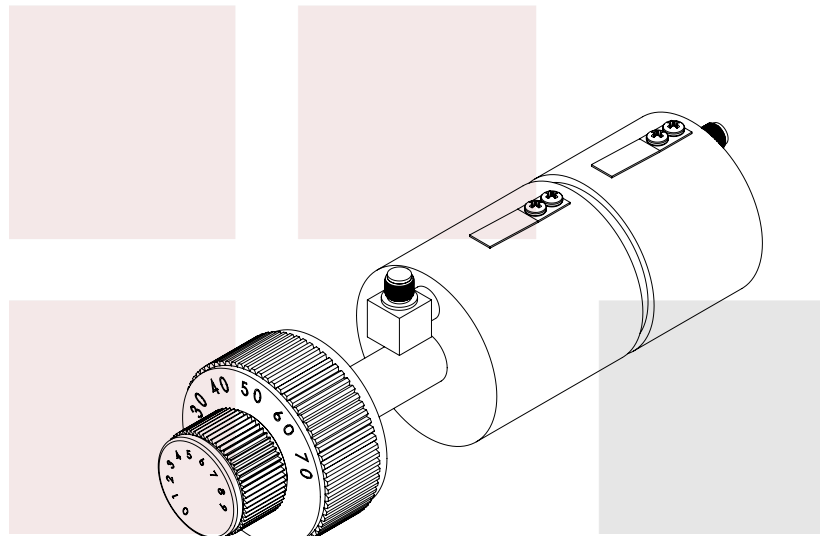
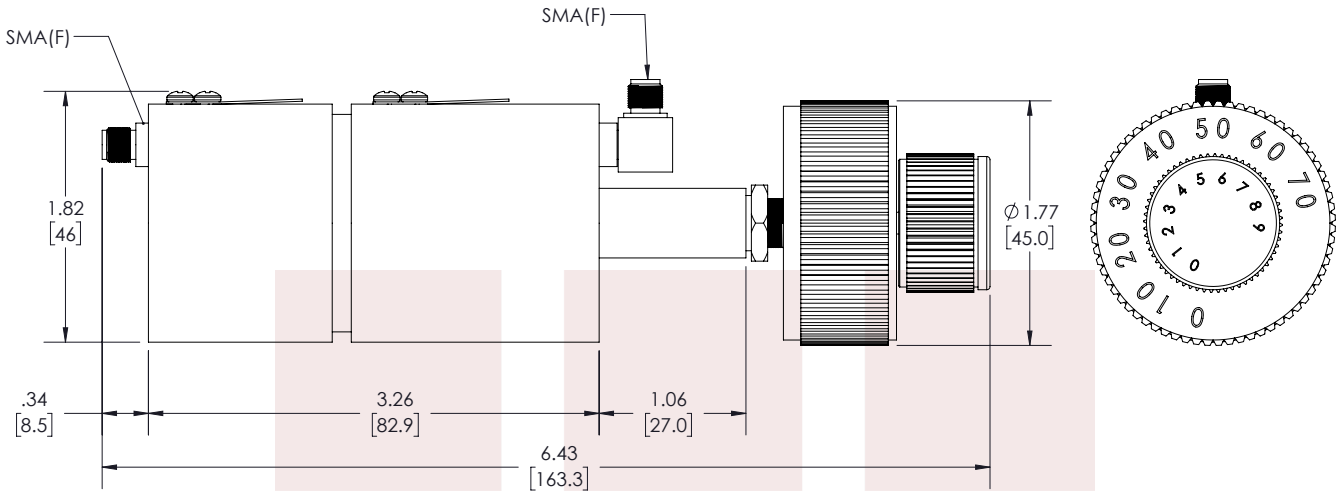
0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz FMAT7444-69](#)

URL: <https://www.fairviewmicrowave.com/69db-step-attenuator-1db-sma-female-dc-18-ghz-2-watts-fmat7444-69-p.aspx>

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



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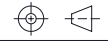
TITLE
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY PSRINIVAS	ITEM NO. FMAT7444-69	REV A
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T-Rev.D