

0 to 9dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz

FMAT7442-9



Features

- 1 dB steps from 0 to 9 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- -20°C to +85°C Operating Temperature
- ± 1 dB Typical Attenuation Accuracy

Applications

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

Description

The FMAT7442-9 is a Step Attenuator that has 9 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 1.2 dB maximum insertion loss, and a maximum VSWR of 1.6:1 at 18 GHz. The design also features excellent attenuation accuracy with ± 1 dB typical at 18 GHz. The Aluminum package has SMA Female connectors, and operates within the temperature range of -20°C to 85°C.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Insertion Loss			1.2	dB
Attenuation Value		0 to 9		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5 μ s Pulse Width, 1% Duty Cycle			200	Watts
VSWR			1.6:1	

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 18					GHz
Attenuation Accuracy	1					dB

Mechanical Specifications

Size

Length	3.819 in [97 mm]
Width	1.772 in [45.01 mm]
Height	1.89 in [48.01 mm]
Weight	1.25 lbs [566.99 g]

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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 -20 to 85 deg C

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

Plotted and Other Data

Notes:

0 to 9dB 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 9dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz FMAT7442-9](#)

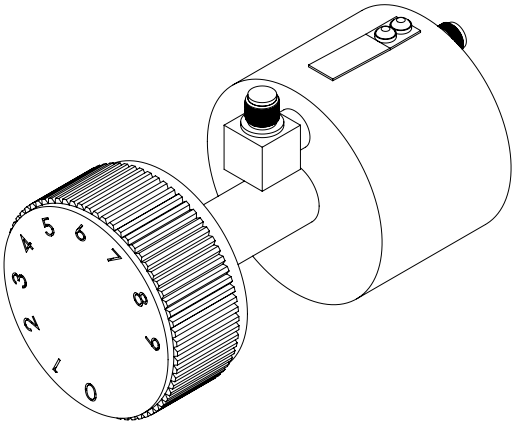
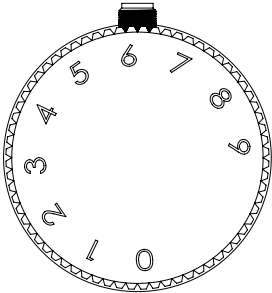
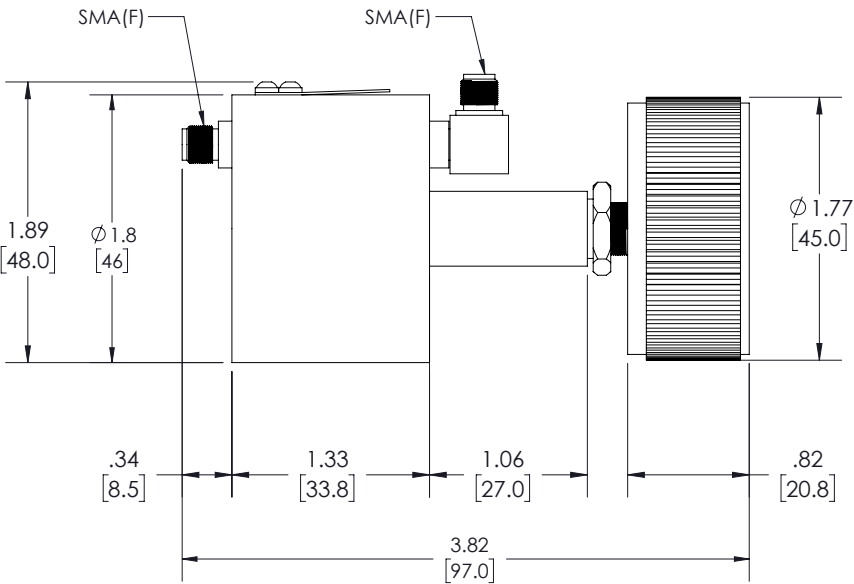
URL: <https://www.fairviewmicrowave.com/90db-step-attenuator-1db-sma-female-dc-18-ghz-2-watts-fmat7442-9-p.aspx>

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FMAT7442-9 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:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.15 [3.81] ± 1/32
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
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

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE
A

CAGE CODE
3FKR5

DRAWN BY
PSRINIVAS

ITEM NO.
FMAT7442-9

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