

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

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	Min	Typ	Max	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
Atten. 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	0.485 lbs [219.99 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	-20 to 85 deg C



Features:

- 1 dB steps from 0 to 9 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- -20°C to $+85^{\circ}\text{C}$ Operating Temperature
- ± 1 dB Typical Attenuation Accuracy

Applications:

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

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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

Plotted and Other Data

Notes:

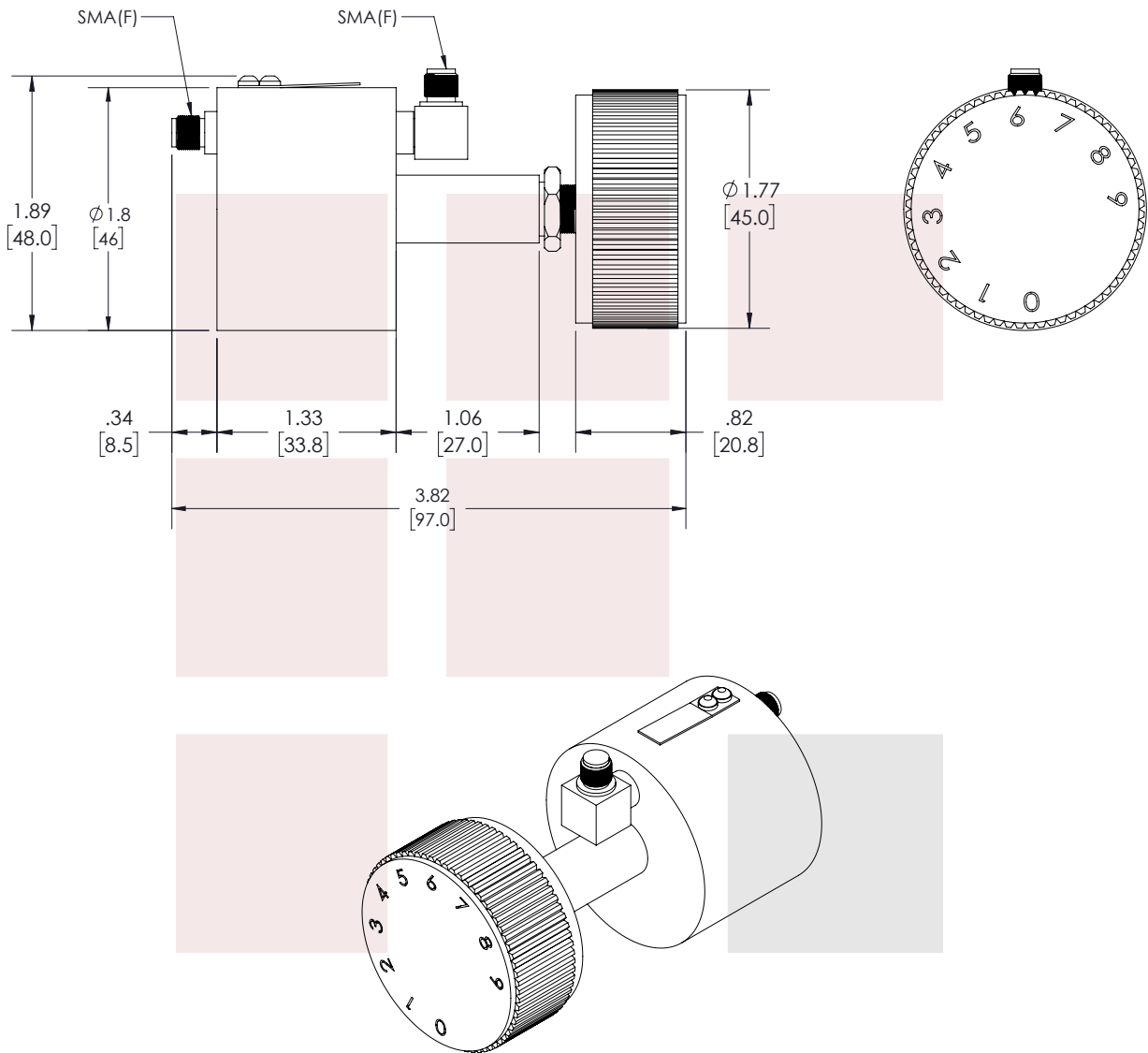
0 to 9dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview 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>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

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



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TITLE

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

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

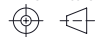
TOLERANCES:

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

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



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY PSRINIVAS	ITEM NO. FMAT7442-9	REV A
-----------	--------------------	-----------------------	------------------------	----------

T-Rev.D