

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

The FMAT7446N-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 N 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, 0.5% 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	4.173 in [105.99 mm]
Height	3.268 in [83.01 mm]
Weight	2.29 lbs [1.04 kg]

Connectors

Description	Connector 1	Connector 2
Type	N Female	N Female
Contact Material & Plating	Beryllium Copper, Gold	
Body Material & Plating	Brass, Nickel	Aluminum

Environmental Specifications

Temperature	
Operating Range	0 to 54 deg C



Features:

- 1 dB steps from 0 to 69 dB Attenuation
- Rotary Dial Control
- N Female Connectors
- 0°C to +54°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:

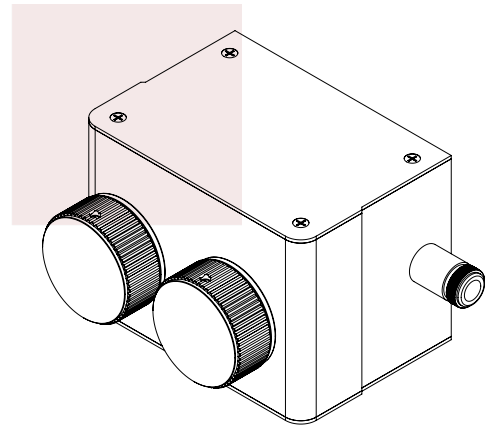
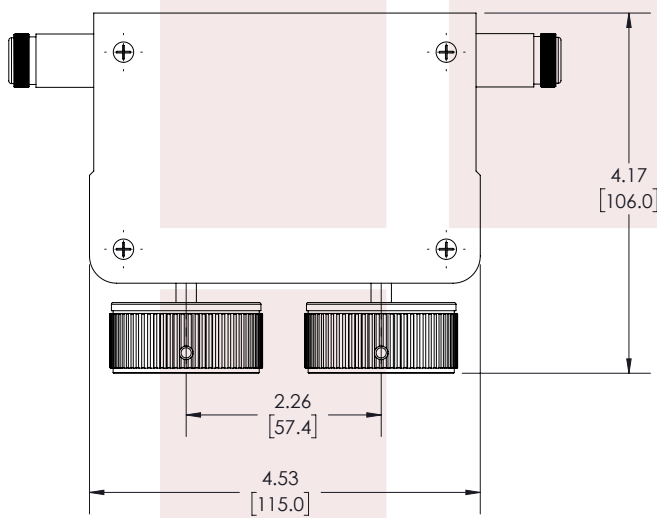
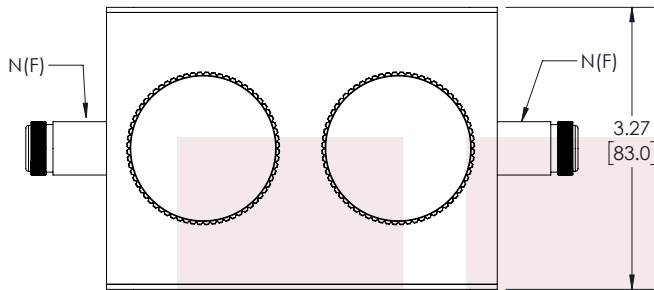
0 to 69dB Rotary Step Attenuator, N-type to N-type Female With 1 dB Step Rated to 2 Watts Up to 18GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview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

For additional information on this product, please click the following link: [0 to 69dB Rotary Step Attenuator, N-type to N-type Female With 1 dB Step Rated to 2 Watts Up to 18GHz FMAT7446N-69](#)

URL: <https://www.fairviewmicrowave.com/69db-step-attenuator-1db-n-female-dc-18-ghz-2-watts-fmat7446n-69-p.aspx>

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



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TITLE

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

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

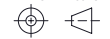
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ± 1/32
.XX = ±.02 [.51] 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



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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. FMAT7446N-69	REV A
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T-Rev.D