

## 0 to 10 dB Rotary Step Attenuator, N-Type Female to N-Type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz



### FMAT7439N-10

#### Features

- 1 dB steps from 0 to 10 dB Attenuation
- Rotary Dial Control
- N Female Connectors
- -20°C to +85°C Operating Temperature
- $\pm 0.5$  dB Typical Attenuation Accuracy

#### Applications

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

#### Description

The FMAT7439N-10 is a Step Attenuator that has 10 dB of total attenuation with 1 dB step size and rotary dial design across a frequency range from DC to 6 GHz. The design is tried and true technology that offers exceptional performance characteristics that include 1 dB maximum insertion loss, and a maximum VSWR of 1.4:1 at 6 GHz. The design also features excellent attenuation accuracy with  $\pm 0.5$  dB typical at 6 GHz. The Brass package has N Female connectors, and operates within the temperature range of -20°C to 85°C.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Insertion Loss			1	dB
Attenuation Value		0 to 10		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5 $\mu$ s Pulse Width, 2% Duty Cycle			100	Watts
VSWR			1.4:1	

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 6					GHz
Attenuation Accuracy	0.5					dB

#### Mechanical Specifications

##### Size

Length	2.44 in [61.98 mm]
Width	1.181 in [30 mm]
Height	1.622 in [41.2 mm]
Weight	0.5 lbs [226.8 g]

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#### Connectors

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

#### 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 10 dB Rotary Step Attenuator, N-Type Female to N-Type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz 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.

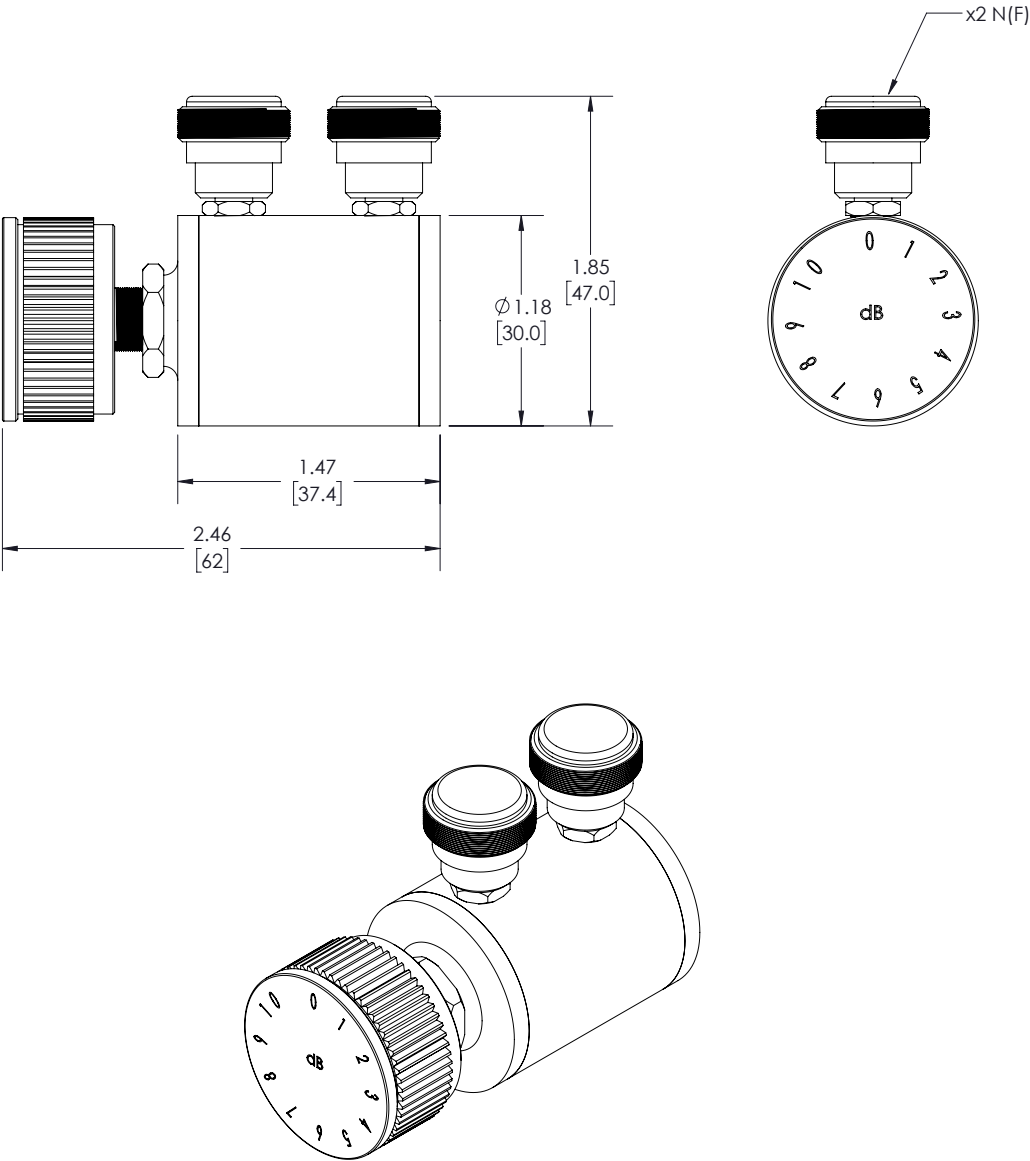
For additional information on this product, please click the following link: [0 to 10 dB Rotary Step Attenuator, N-Type Female to N-Type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz FMAT7439N-10](#)

URL: <https://www.fairviewmicrowave.com/10db-step-attenuator-1db-n-female-dc-6-ghz-2-watts-fmat7439n-10-p.aspx>

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FMAT7439N-10 CAD Drawing

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TITLE

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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS  
.XX = ±.02 [.51] ± 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.  
FMAT7439N-10

REV  
A