

0 to 70 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 6 GHz and Up to 2 Watts in a Benchtop Rotary Design



FMAT1051N

Features

- Two Rotary Dials
- 0 to 70 dB Attenuation
- 1.65:1 VSWR Maximum
- ± 3.5 dB Attenuation Accuracy Maximum
- SMA Female Connectors
- Maximum Power 2 Watts (CW)

Applications

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

Description

The FMAT1051N is a Step Attenuator that has 70 dB of total attenuation in a Rotary Step designed across the frequency range of DC to 6 GHz. Turn rotary dials for desired attenuation level, total attenuation is the sum of all selected. The design is tried and true technology that offers exceptional performance characteristics that include 1.8 dB maximum insertion loss, and a maximum VSWR of 1.65:1. The design also features excellent attenuation accuracy with $\pm 3.5\%$ dB maximum. The Aluminum package has N-Type 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			1.8	dB
Attenuation Value		0 to 70		dB
Step Size		1		dB
Step Type		Benchtop Rotary		
Accuracy Statement		± 0.5 dB (=10dB) ± 0.8 dB or 3% (<70dB) $\pm 3.5\%$ (70dB)		
Input Power (CW)			2	Watts
Input Power, Peak 5 μ s pulse width 2% duty cycle			100	Watts
VSWR			1.65:1	

Electrical Specification Notes:
Accuracy Statement applies to largest value

Mechanical Specifications

Size

Length	7.5 in [190.5 mm]
Width	3.43 in [87.12 mm]
Height	3.11 in [78.99 mm]
Weight	2.58 lbs [1.17 kg]
Body Material and Plating	Aluminum, Paint

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Connectors

Description	Connector 1	Connector 2
Type	N Female	N Female
Contact Material and Plating	Beryllium Copper, Gold	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 70 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 6 GHz and Up to 2 Watts in a Benchtop Rotary Design 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 70 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 6 GHz and Up to 2 Watts in a Benchtop Rotary Design FMAT1051N](#)

URL: <https://www.fairviewmicrowave.com/70db-step-attenuator-1db-n-female-dc-6-ghz-2-watts-fmat1051n-p.aspx>

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FMAT1051N CAD Drawing

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