

## 0 to 41 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 4 GHz and Up to 2 Watts in a Push Button Design



### FMAT1049N

#### Features

- 1, 2, 4, 8, 10, and 16 dB step buttons
- 0 to 41 dB Attenuation
- 1.55:1 VSWR Maximum
- 1.8 dB Attenuation Accuracy Maximum
- N-Type Female Connectors
- Maximum Power 2 Watts (CW)

#### Applications

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

#### Description

The FMAT1049N is a Step Attenuator that has 41 dB of total attenuation with 1, 2, 4, 8, 10, and 16 dB push button steps, designed across the frequency range of DC to 4 GHz. Select button for desired attenuation level, total attenuation is the sum of all buttons selected. The design is tried and true technology that offers exceptional performance characteristics that include 4.5 dB maximum insertion loss, and a maximum VSWR of 1.55:1. The design also features excellent attenuation accuracy with 1.8 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		4	GHz
Impedance		50		Ohms
Insertion Loss			4.5	dB
Attenuation Value		0 to 41		dB
Step Size		1		dB
Step Type		Push Button		
Accuracy Statement		±1.8 dB		
Input Power (CW)			2	Watts
Input Power, Peak 5 µs pulse width 2% duty cycle			100	Watts
VSWR			1.55:1	

#### Mechanical Specifications

##### Size

Length	5.28 in [134.11 mm]
Width	1.4 in [35.56 mm]
Height	0.79 in [20.07 mm]
Weight	0.31 lbs [140.61 g]
Body Material and Plating	Aluminum, Paint

#### Connectors

Description	Connector 1	Connector 2
Type	N Female	N Female

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### Connectors

Description	Connector 1	Connector 2
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 41 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 4 GHz and Up to 2 Watts in a Push Button 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 41 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 4 GHz and Up to 2 Watts in a Push Button Design FMAT1049N](#)

URL: <https://www.fairviewmicrowave.com/41db-step-attenuator-1db-n-female-dc-4-ghz-2-watts-fmat1049n-p.aspx>

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FMAT1049N CAD Drawing

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