

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



FMAT1049S

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
- SMA Female Connectors
- Maximum Power 2 Watts (CW)

Applications

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

Description

The FMAT1049S 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 SMA 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	SMA Female	SMA 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, Gold	Brass, Gold

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 SMA 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 SMA Female Interface Rated Up to 4 GHz and Up to 2 Watts in a Push Button Design FMAT1049S](#)

URL: <https://www.fairviewmicrowave.com/41db-step-attenuator-1db-sma-female-dc-4-ghz-2-watts-fmat1049s-p.aspx>

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FMAT1049S CAD Drawing

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