



0 to 90 dB Step Attenuator 50 Ohm BNC Female To 50 Ohm BNC Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design

# 

# **FMAT1040B**

### **Features**

- 1, 2, 4, 8, 16, 20, 20, and 20 dB step buttons
- · 0 to 90 dB Attenuation
- 3% Attenuation Accuracy Maximum

# **Applications**

- Instrumentation
- · Precision Measurements

- · BNC Female Connectors
- Maximum Power 2 Watts (CW)
- · Prototyping and Characterization
- · Production Systems

# Description

The FMAT1040B is a Step Attenuator that has 90 dB of total attenuation with 1, 2, 4, 8, 16, 20, 20, and 20 dB push button steps, designed across the frequency range of DC to 1 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 2 dB maximum insertion loss, and a maximum VSWR of 1.4:1. The design also features excellent attenuation accuracy with 3% Maximum. The Nickel plated Brass package has BNC Female connectors, and operates within the temperature range of -20°C to 85°C.

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Impedance		50		Ohms
Insertion Loss			2	dB
Attenuation Value		0 to 90		dB
Step Size		1		dB
Step Type		Push Button		
Accuracy Statement		±0.8dB (<50dB Atten)		
		±3%dB (>50dB Atten)		
Input Power (CW)			2	Watts
Input Power, Peak			100	Watts
5 μs pulse width 2% duty cycle				
VSWR			1.4:1	

# **Mechanical Specifications**

 Length
 6.142 in [156.01 mm]

 Width
 0.787 in [19.99 mm]

 Height
 1.398 in [35.51 mm]

 Weight
 0.19 lbs [86.18 g]

 Body Material and Plating
 Aluminum, Paint



0 to 90 dB Step Attenuator 50 Ohm BNC Female To 50 Ohm BNC Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design



# **FMAT1040B**

### **Connectors**

Description	Connector 1	Connector 2
Туре	BNC Female	BNC Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	terial and Plating 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 90 dB Step Attenuator 50 Ohm BNC Female To 50 Ohm BNC Female With 1 dB Step Rated To 2 Watts Up To 1 GHz 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 90 dB Step Attenuator 50 Ohm BNC Female To 50 Ohm BNC Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design FMAT1040B

URL: https://www.fairviewmicrowave.com/90db-step-attenuator-1db-bnc-female-dc-1-ghz-2-watts-fmat1040b-p.aspx

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

# **FMAT1040B CAD Drawing**

0 to 90 dB Step Attenuator 50 Ohm BNC Female To 50 Ohm BNC Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design

