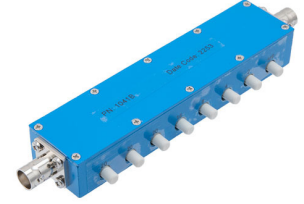


0 to 90 dB Step Attenuator 50 Ohm BNC Female  
To 50 Ohm BNC Female With 1 dB Step Rated To  
2 Watts Up To 3 GHz in a Push Button design



## FMAT1041B

### Features

- 1, 2, 4, 8, 16, 20, 20, and 20 dB step buttons
- 0 to 90 dB Attenuation
- 4% Attenuation Accuracy Maximum
- BNC Female Connectors
- Maximum Power 2 Watts (CW)

### Applications

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

### Description

The FMAT1041B 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 3 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 3.5 dB maximum insertion loss, and a maximum VSWR of 1.5:1. The design also features excellent attenuation accuracy with 4% maximum. The Nickel plated Brass package has BNC Female connectors, and operates within the temperature range of -20°C to 85°C.

### Electrical Specifications

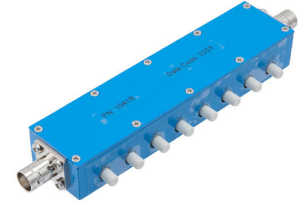
Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Insertion Loss			3.5	dB
Attenuation Value		0 to 90		dB
Step Size		1		dB
Step Type		Push Button		
Accuracy Statement		±2dB (<50dB Atten) ±4%dB (>50dB Atten)		
Input Power (CW)			2	Watts
Input Power, Peak 5 μs pulse width 2% duty cycle			100	Watts
VSWR			1.5:1	

### Mechanical Specifications

#### Size

Length	6.142 in [156.01 mm]
Width	0.787 in [19.99 mm]
Height	1.398 in [35.51 mm]
Weight	0.18 lbs [81.65 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 3 GHz in a Push Button design



## FMAT1041B

### Connectors

Description	Connector 1	Connector 2
Type	BNC Female	BNC 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 90 dB Step Attenuator 50 Ohm BNC Female To 50 Ohm BNC Female With 1 dB Step Rated To 2 Watts Up To 3 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 3 GHz in a Push Button design FMAT1041B](#)

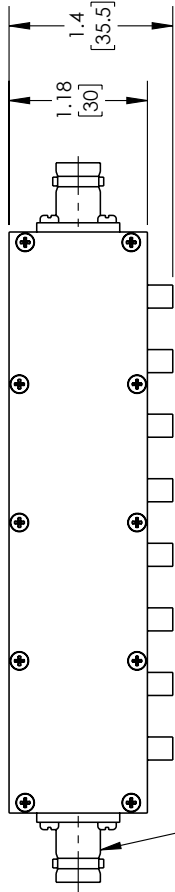
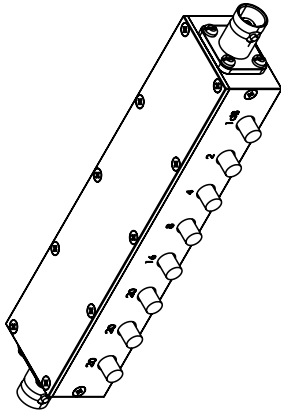
URL: <https://www.fairviewmicrowave.com/90db-step-attenuator-1db-bnc-female-dc-3-ghz-2-watts-fmat1041b-p.aspx>

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 implement 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.

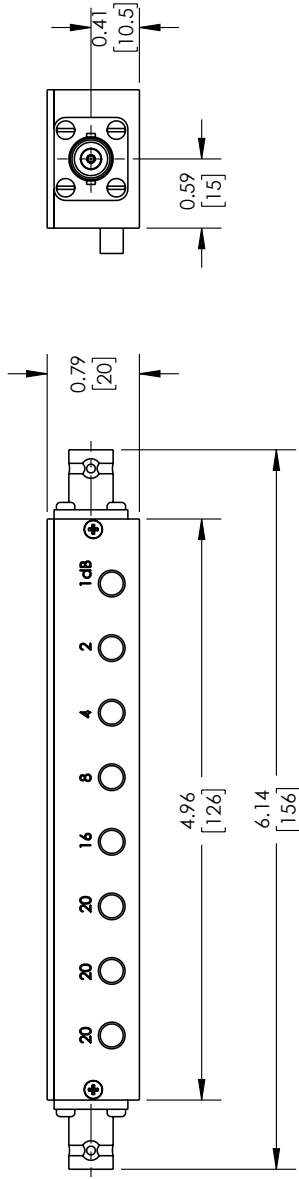
# FMAT1041B CAD Drawing

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 3 GHz in a Push Button design

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	12/28/22
		APPROVED
		SPONG



2X BNC FEMALE CONNECTOR



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



TITLE

THIRD-ANGLE PROJECTION  
 THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.  
 SHEET 1 OF 1

DIMENSIONS IN [ ] ARE MILLIMETERS		DIMENSIONS IN [ ] ARE INCHES	
TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
X ± .2 [5.08]	FRACTIONS	L ≤ 12 [305]	± .1 [25] / -0
XX ± .02	12 [305] < L ≤ 60 [1524]		± .2 [51] / -0
XXX ± .005 [13]	60 [1524] < L ≤ 120 [3048]		± .4 [102] / -0
	120 [3048] < L ≤ 300 [7620]		± .6 [152] / -0
	300 [7620] < L ≤ +5%L / -0		

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	SCALE	REV.
A	3FKR5	VTHANGARA	FMAT1041B	N/A	A