

0 to 90 dB Step Attenuator 50 Ohm SMA Female  
 To 50 Ohm SMA Female With 1 dB Step Rated To  
 5 Watts Up To 4 GHz in a Push Button design



## FMAT1045S

### Features

- 1, 2, 4, 8, 16, 20, 20, and 20 dB step buttons
- 0 to 90 dB Attenuation
- 5% Attenuation Accuracy Maximum
- SMA Female Connectors
- Maximum Power 5 Watts (CW)

### Applications

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

### Description

The FMAT1045S 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 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 5 dB maximum insertion loss, and a maximum VSWR of 1.75:1. The design also features excellent attenuation accuracy with 5% Maximum. The Nickel plated Brass package has SMA Female connectors, and operates within the temperature range of -20°C to 85°C.

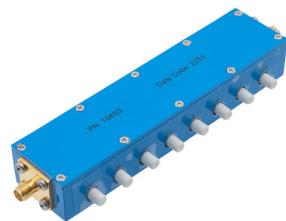
### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
Impedance		50		Ohms
Insertion Loss			5	dB
Attenuation Value		0 to 90		dB
Step Size		1		dB
Step Type		Push Button		
Accuracy Statement		±2.5dB (<50dB Atten) ±5%dB (>50dB Atten)		
Input Power (CW)			5	Watts
Input Power, Peak			100	Watts
5 µs pulse width 2% duty cycle				
VSWR			1.75:1	

### Mechanical Specifications

Size	
Length	5.709 in [145.01 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

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## FMAT1045S

### Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA 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 SMA Female To 50 Ohm SMA Female With 1 dB Step Rated To 5 Watts Up To 4 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 SMA Female To 50 Ohm SMA Female With 1 dB Step Rated To 5 Watts Up To 4 GHz in a Push Button design FMAT1045S](https://www.fairviewmicrowave.com/90db-step-attenuator-1db-sma-female-dc-4-ghz-5-watts-fmat1045s-p.aspx)

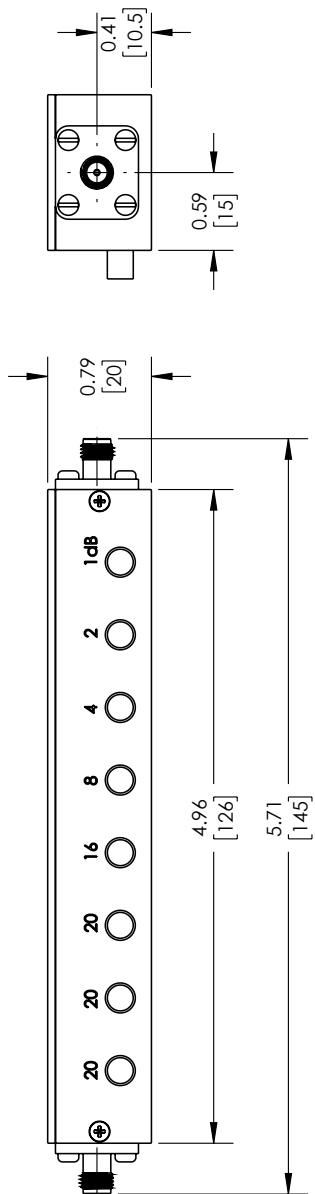
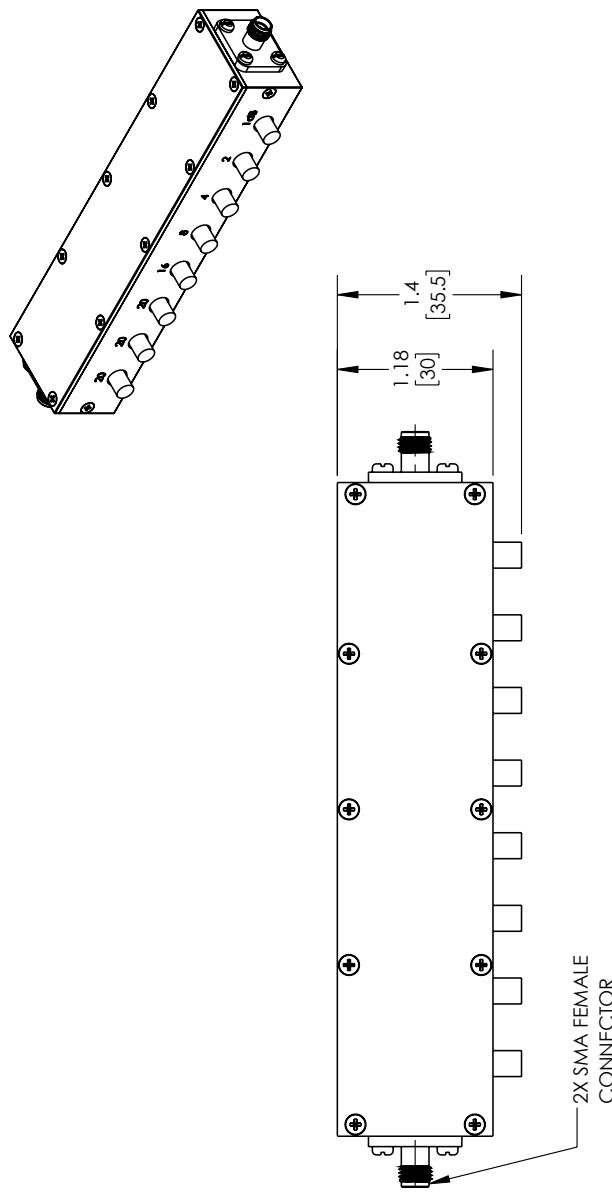
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**FMAT1045S CAD Drawing**

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



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$X = \pm .02$	[.08]	FRACTIONS	$L = [12.385] \pm 1^{+} [.05]$	12 [305] $\pm 1^{+} [.60]$	12 [315] / -0
$XX = \pm .02$	[.51]		$L = [10.154] \pm 1^{+} [1.20]$	10 [254] $\pm 1^{+} [1.50]$	10 [265] / -0
$XXX = \pm .005$	[.13]	ANGLES, $\pm .1^{\circ}$	$L = [30.308] \pm 1^{+} [3.00]$	30 [762] $\pm 1^{+} [30]$	30 [782] / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE	ITEM NO.	FMTAT1045S	REV A
SIZE	CAGE CODE	DRAWN BY	VTHANGARAJ		
A	3FKR5				

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