

6 dB Fixed Attenuator SMA Male (Plug) To SMA Female (Jack) From 0.009 MHz To 6 GHz Rated To 2 Watts, Copper Body, 1.15 VSWR



FMAT1012

Features

- 9 kHz to 6 GHz Frequency Range
- Attenuation 6±0.5 dB
- Max Power 2 Watts (CW)
- Return Loss < -23 dB

Applications

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production systems

Description

Fairview Microwave carries a broad selection of fixed attenuators with a wide range of attenuation levels, frequency ranges, and power dissipation ranges. Also known as RF pads, RF microwave attenuators lower the amplitude of a signal (or attenuate) a known amount. These attenuator pads can be used in a wide variety of applications including reducing a signal level to protect measurement equipment or other circuitry, extending the range of power meters and amplifiers, and impedance matching circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The FMAT1012 is a 6 dB Fixed Attenuator that operates from 0.009 to 6 GHz and is rated to 2 Watts. The versatile coaxial package uses SMA male to SMA female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	9KHz		6	GHz
Impedance		50		Ohms
Nominal Attenuation		6		dB
Attenuation Accuracy			±0.5	dB
VSWR			1.15:1	
Return Loss			-23	dB
Input Power, CW			2	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	9KHz to 3	3 to 6				GHz
Return Loss, Typ	-30	-27				dB
Return Loss, Max	-25	-23				dB
Attenuation Accuracy, Typ	0.15	0.25				dB
Attenuation Accuracy, Max	±0.3	±0.5				dB

Mechanical Specifications

Size

Length	1.22 in [30.99 mm]
Width/Diameter	0.37 in [9.4 mm]

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Height	0 in [0 mm]
Weight	0.024 lbs [10.89 g]
Body Material and Plating	Copper
Configuration	
Design	Fixed
Package Style	Connectorized

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Hex Size	5/16 inch	

Environmental Specifications

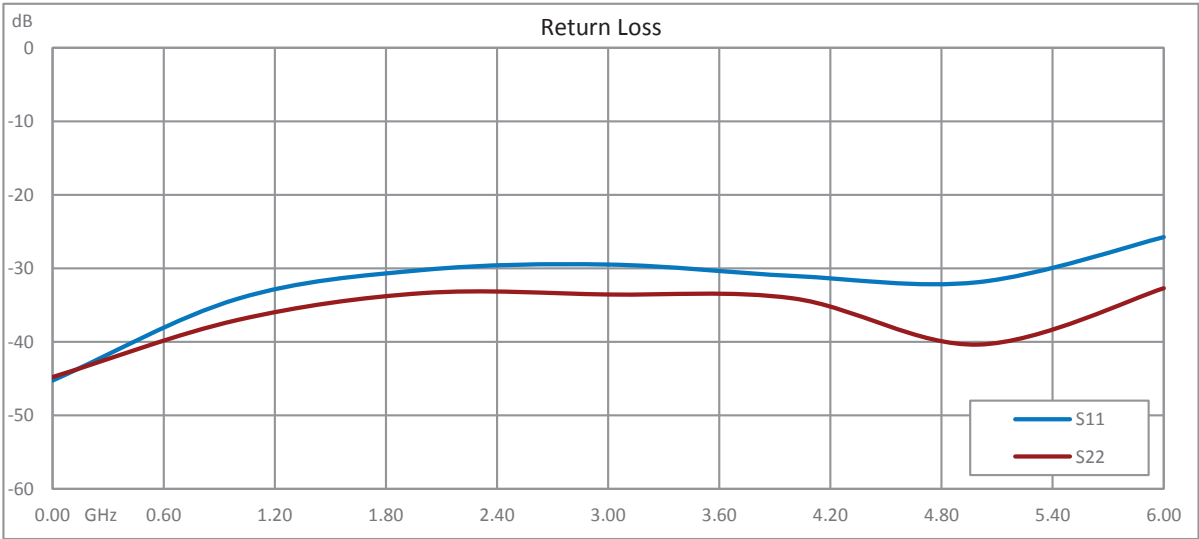
Temperature

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

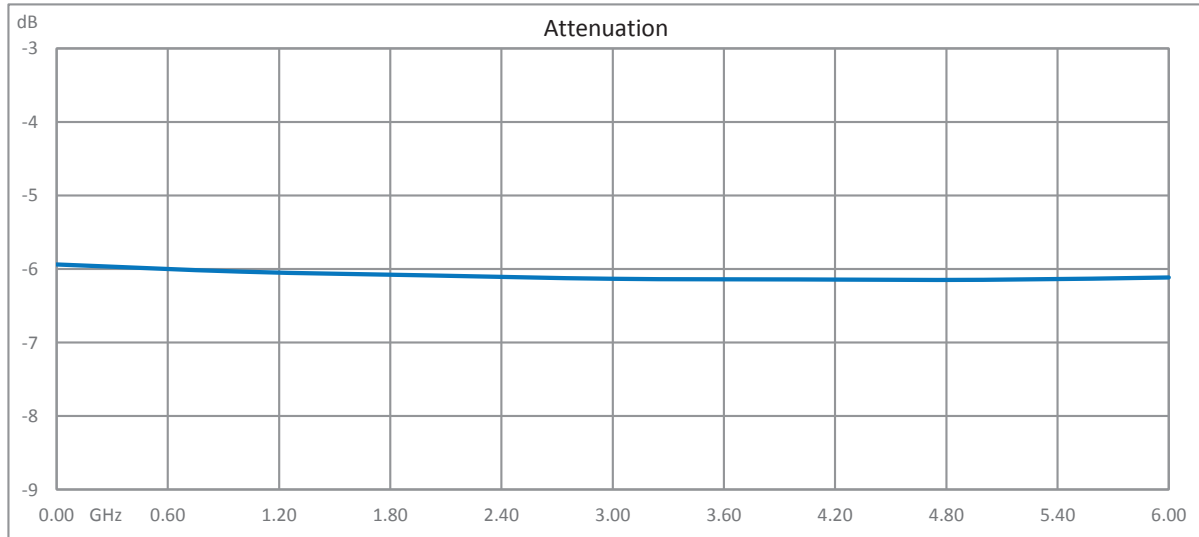
Typical Performance Data



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6 dB Fixed Attenuator SMA Male (Plug) To SMA Female (Jack) From 0.009 MHz To 6 GHz Rated To 2 Watts, Copper Body, 1.15 VSWR 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.

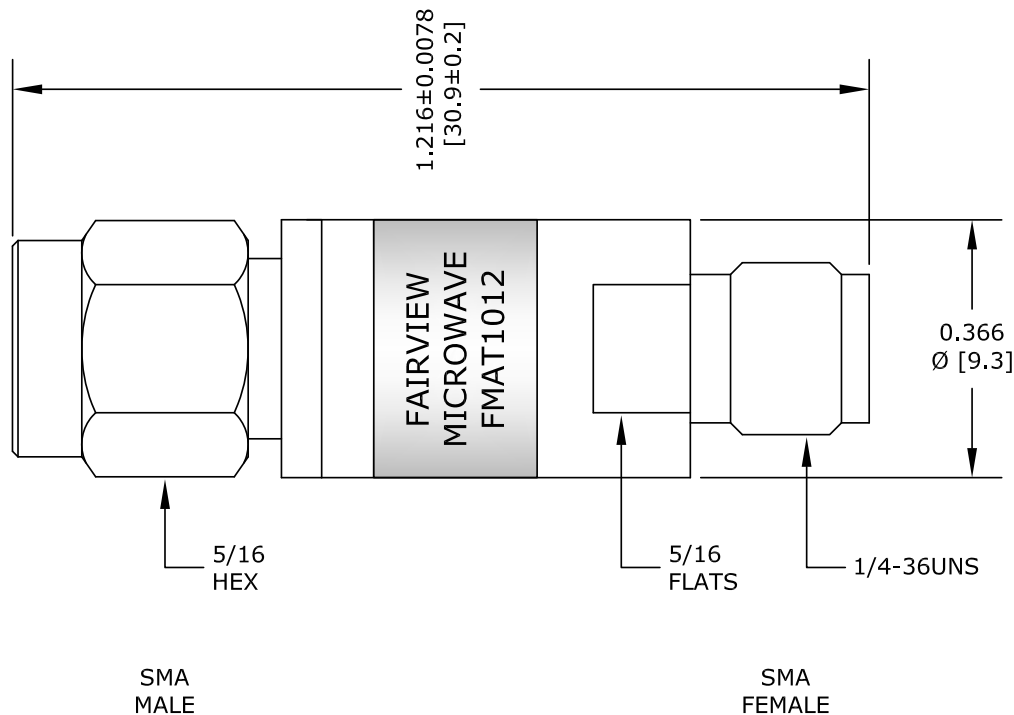
For additional information on this product, please click the following link: [6 dB Fixed Attenuator SMA Male \(Plug\) To SMA Female \(Jack\) From 0.009 MHz To 6 GHz Rated To 2 Watts, Copper Body, 1.15 VSWR FMAT1012](https://www.fairviewmicrowave.com/6db-fixed-attenuator-sma-male-sma-female-2-watts-fmat1012-p.aspx)

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FMAT1012 CAD Drawing

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GENERAL TOLERANCES	
0.039-0.158	±0.0055
0.158-0.630	±0.0059
0.630-2.480	±0.0078
>2.480	±0.0118

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE		DWG NO		CAGE CODE	
		FMAT1012		3FKR5	
		CAD FILE	030116	SHEET	SCALE N/A SIZE A 3045