

20 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Unidirectional Up to 12.4 GHz Rated to 10 Watts, Black Aluminum Body, 1.3:1 VSWR



FMAT7463-20

Features

- DC to 12.4 GHz Frequency Range
- SMA Connectorized Design
- Attenuation 20 dB \pm 0.6 dB
- Max Power 10 Watts (CW)
- Max VSWR of 1.3:1

Applications

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems
- WIFI 6E
- 5G Cellular Bands

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 FMAT7463-20 is a 20 dB Fixed Attenuator that operates from DC to 12.4 GHz and is rated to 10 Watts. The versatile coaxial package uses SMA male to SMA female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.6		dB
VSWR			1.3:1	
Input Power, CW			10	Watts
Derated linearly to 1W at 125°C				
Input Power, Peak			500	Watts
5 μ s pulse, 2% Duty Cycle				

Mechanical Specifications

Size

Length	3.03 in [76.96 mm]
Width/Diameter	0.79 in [20.07 mm]
Height	0.79 in [20.07 mm]
Weight	0.016 lbs [7.26 g]
Body Material and Plating	Black Anodized Aluminum

Configuration

Design	Fixed, Unidirectional
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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel	Brass, Nickel

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data

20 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Unidirectional Up to 12.4 GHz Rated to 10 Watts, Black Aluminum Body, 1.3:1 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.

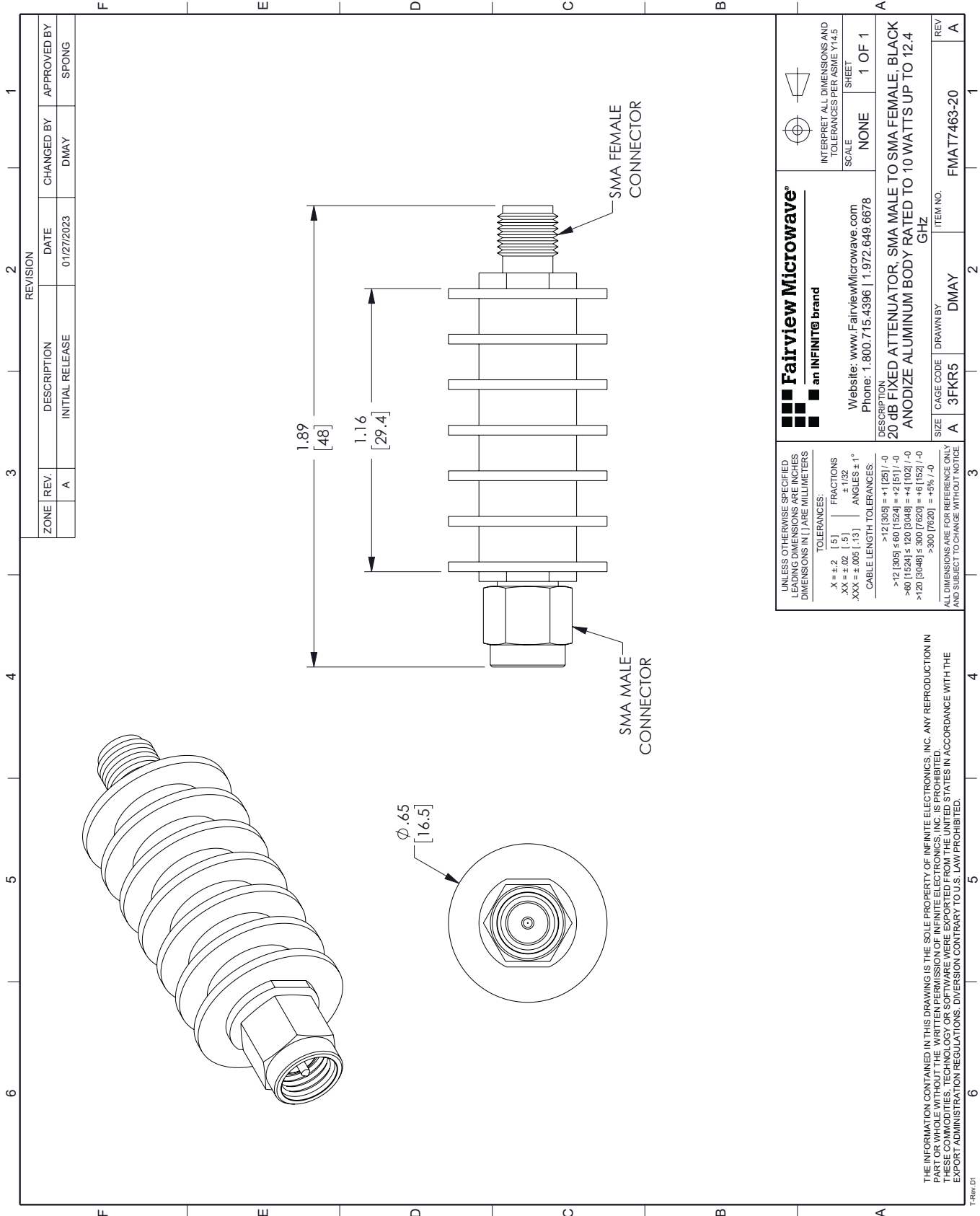
For additional information on this product, please click the following link: [20 dB Fixed Attenuator SMA Male \(Plug\) to SMA Female \(Jack\) Unidirectional Up to 12.4 GHz Rated to 10 Watts, Black Aluminum Body, 1.3:1 VSWR FMAT7463-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-sma-male-sma-female-10-watts-fmat7463-20-p.aspx>

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FMAT7463-20 CAD Drawing

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REVISION		DATE		APPROVED BY	
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	01/27/2023	DMAY	SPONG

Fairview Microwave® an INFINIT@brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		DESCRIPTION: 20 dB FIXED ATTENUATOR, SMA MALE TO SMA FEMALE, BLACK ANODIZE ALUMINUM BODY RATED TO 10 WATTS UP TO 12.4 GHz CAGE CODE: 3FKR5 ITEM NO.: FMAT7463-20
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X = ±.2 [.5] FRACTIONS ±.1/32 XX = ±.02 [.5] ANGLES ±1° XXX = ±.005 [.13] CABLE LENGTH TOLERANCES: >12 [305] = +1 [25] / -0 >12 [305] ≤ 60 [1524] = +2 [51] / -0 >60 [1524] ≤ 120 [3048] = +4 [102] / -0 >120 [3048] ≤ 300 [7620] = +6 [152] / -0 >300 [7620] = +96 [2438] / -0 ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.		SIZE: A DRAWN BY: DMAY REV: A

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