

20dB RF fixed attenuator 50W, DC to 18GHz, SMA male to SMA female



FMAT7603-20

Features

- Bidirectional
- DC to 18 GHz Range
- Attenuation 20 +/- 1.25 dB
- 50 Watts Average Input Power
- VSWR <1.45:1

Applications

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

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 (attenuate) a known amount. These attenuators 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 FMAT7603-20 is a 20 dB Fixed Attenuators that operates from DC to 18 GHz and is rated to 50 Watts. The versatile coaxial package uses SMA male to SMA female connectors and is also REACH and RoHS compliant.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
VSWR			1.45:1	
Input Power, CW			50	Watts
Input Power, Peak			1	kWatts
5μs pulse w/ 5% duty cycle				

Mechanical Specifications

Size

Length	5.19684 in [132 mm]
Width/Diameter	1.77165 in [45 mm]
Height	1.77165 in [45 mm]
Weight	1.04 lbs [471.74 g]
Body Material and Plating	Black Anodized Aluminum

Configuration

Design	Fixed, Bidirectional
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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

20dB RF fixed attenuator 50W, DC to 18GHz, SMA male to SMA female 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: [20dB RF fixed attenuator 50W, DC to 18GHz, SMA male to SMA female FMAT7603-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-sma-male-sma-female-50-watts-fmat7603-20-p.aspx>

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FMAT7603-20 CAD Drawing
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