

30 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 10 GHz Rated to 100 Watts, Aluminum Black Anodized Body, 1.5 VSWR



FMAT7581-30

Features

- DC to 10 GHz Range
- Attenuation 30 $\pm$ 1 dB
- 100 Watts Average Input Power
- VSWR <1.5:1

Applications

- Precision Measurements
- Production Systems
- Instrumentation
- Prototyping and Characterization
- 5G and 6G communications

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 FMAT7581-30 is a 30 dB Fixed Attenuator that operates from DC to 10 GHz and is rated to 100 Watts. The versatile coaxial package uses type N male to type N female connectors and is also REACH compliant.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
Impedance		50		Ohms
Nominal Attenuation		30		dB
Attenuation Accuracy		$\pm$ 1		dB
VSWR			1.5:1	
Input Power, CW			100	Watts
Input Power, Peak			5	kWatts
5 μ s PW with 2% duty cycle				

Mechanical Specifications

Size

Length	6.81 in [172.97 mm]
Width/Diameter	3.35 in [85.09 mm]
Height	3.39 in [86.11 mm]
Weight	3.31 lbs [1.5 kg]
Body Material and Plating	Aluminum, Black Anodized

Configuration

Design	Fixed, Unidirectional
Design Type	Standard
Package Style	Connectorized

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N 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

30 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 10 GHz Rated to 100 Watts, Aluminum Black Anodized Body, 1.5 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: [30 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Up to 10 GHz Rated to 100 Watts, Aluminum Black Anodized Body, 1.5 VSWR FMAT7581-30](#)

URL: <https://www.fairviewmicrowave.com/30db-fixed-attenuator-n-male-n-female-100-watts-fmat7581-30-p.aspx>

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FMAT7581-30 CAD Drawing

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