

20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 8.5 GHz Rated to 50 Watts, Black Aluminum Alloy Body, 1.3 VSWR



SA8N50-20

Features

- Bidirectional
- DC to 8.5 GHz Frequency Range
- Attenuation 20±0.75 dB
- Max Power 50 Watts (CW)
- VSWR < 1.3:1

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 SA8N50-20 is a 20 dB Fixed Attenuator that operates from DC to 8.5 GHz and is rated to 50 Watts. The versatile coaxial package uses type N male to type N female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8.5	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.75		dB
VSWR			1.3:1	
Input Power, CW			50	Watts
rated at +25°C, derated linearly to 5W at +125°C				
Input Power, Peak			5	kWatts
5µs pulse, 0.5% duty cycle				

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8.5				GHz
VSWR, Max	1.2:1	1.3:1				

Electrical Specification Notes:
Values at +25°C, sea level.

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Mechanical Specifications

Size

Length	4.38 in [111.25 mm]
Width/Diameter	1.62 in [41.15 mm]
Height	0 in [0 mm]
Weight	0.506 lbs [229.52 g]
Body Material and Plating	Black Aluminum Alloy

Configuration

Design	Fixed, Bidirectional
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Connector Specification	MIL-STD-348A	MIL-STD-348A
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature

Operating Range	-55 to +125 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

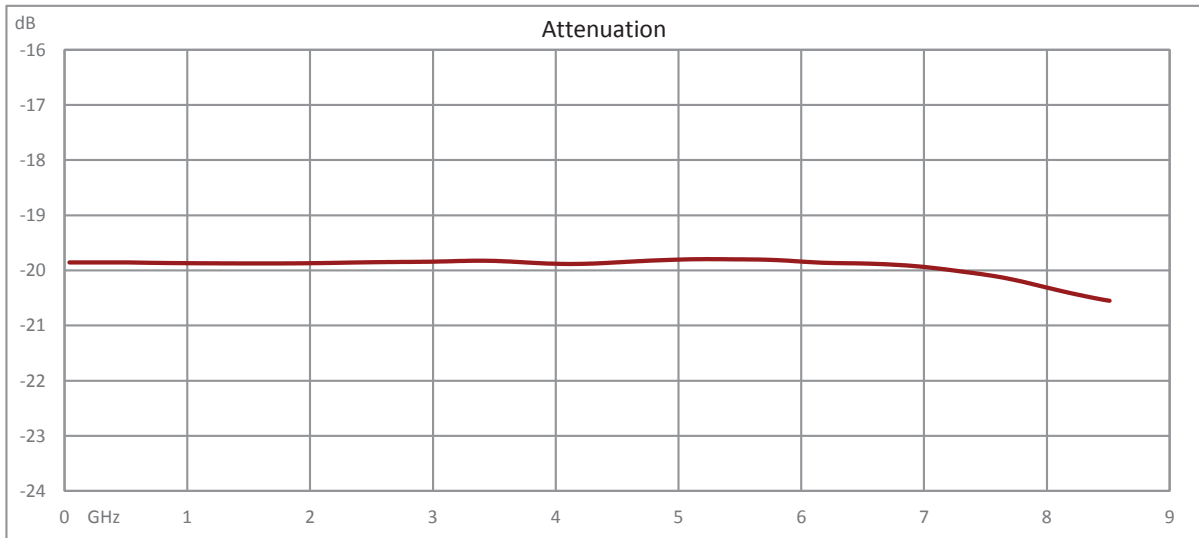
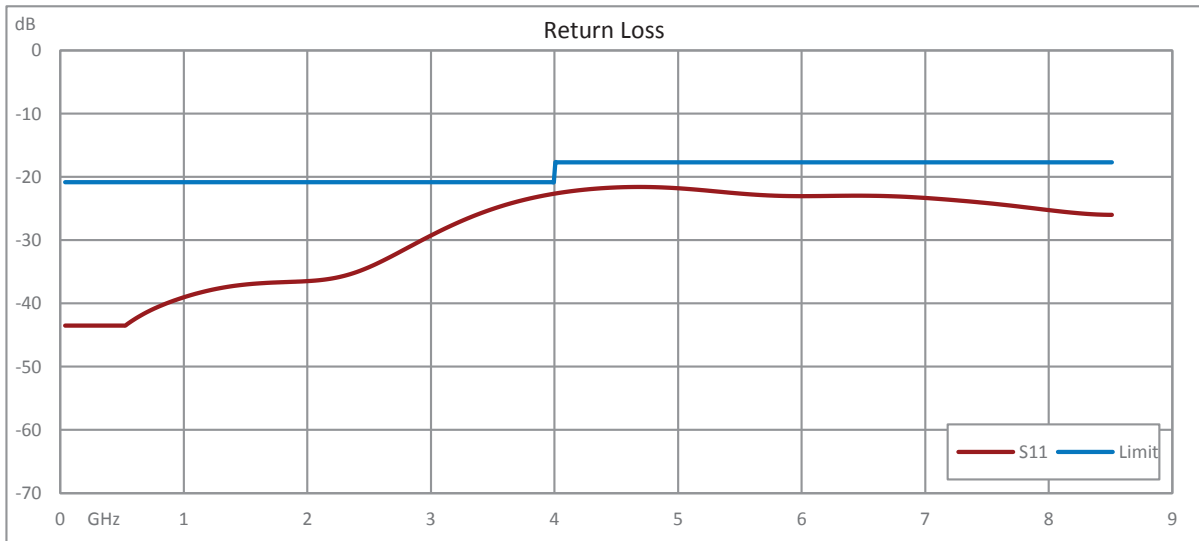
Notes:

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Typical Performance Data



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For additional information on this product, please click the following link: [20 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Up to 8.5 GHz Rated to 50 Watts, Black Aluminum Alloy Body, 1.3 VSWR SA8N50-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-n-male-n-female-50-watts-sa8n50-20-p.aspx>

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