

## 20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 8 GHz Rated to 150 Watts, Heatsink Body, 1.5 VSWR



### SA8N150-20

#### Features

- Directional
- DC to 8 GHz Frequency Range
- Attenuation 20±2 dB
- Max Power 150 Watts (CW)
- VSWR < 1.5:1

#### 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 SA8N150-20 is a 20 dB Fixed Attenuator that operates from DC to 8 GHz and is rated to 150 Watts. The versatile coaxial package uses type N male to type N female connectors. The Black Anodized Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
VSWR			1.5:1	
Input Power, CW			150	Watts
derated linearly to 15W at +125°C				
Input Power, Peak			2.5	kWatts
5µs pulse, 0.1% duty cycle				

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 4	4 to 6	6 to 8		GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1		
Attenuation Accuracy, Typ	0.75	0.75	1.25	2		dB

#### Mechanical Specifications

##### Size

Length	6.39 in [162.31 mm]
Width/Diameter	5.8 in [147.32 mm]

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Height	4.21 in [106.93 mm]
Weight	2.595 lbs [1.18 kg]
Body Material and Plating	Black Anodized Aluminum Heatsink
Configuration	
Design	Fixed, Directional
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Connector Specification	MIL-STD-348	MIL-STD-348
Contact Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver
Body Material and Plating	Stainless Steel, Silver	Stainless Steel, Silver

Mechanical Specification Notes:  
Connector interface in accordance with MIL-STD-348 and MIL-PRF-39012

Environmental Specifications

Temperature	
Operating Range	-55 to +125 deg C

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

Plotted and Other Data

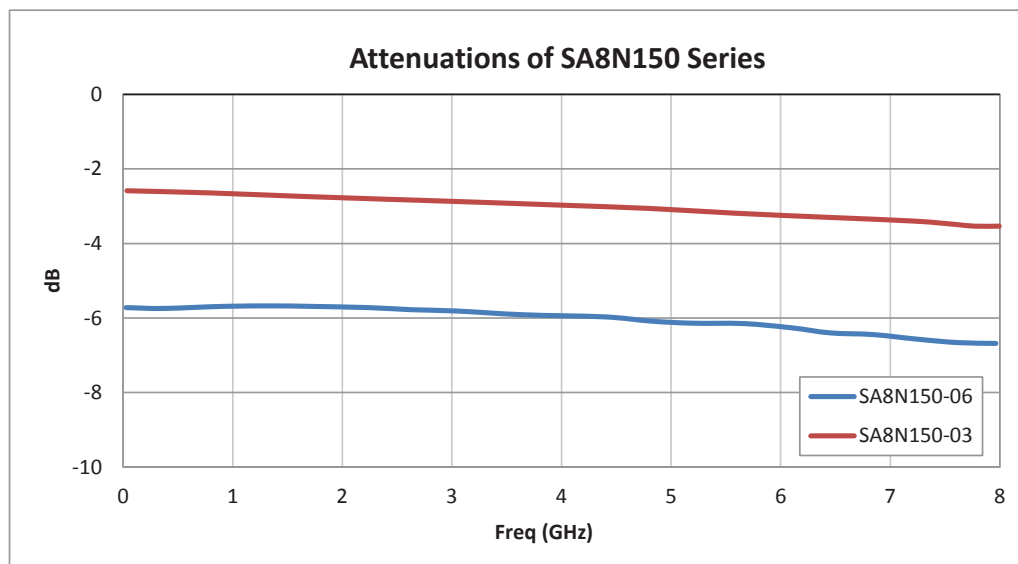
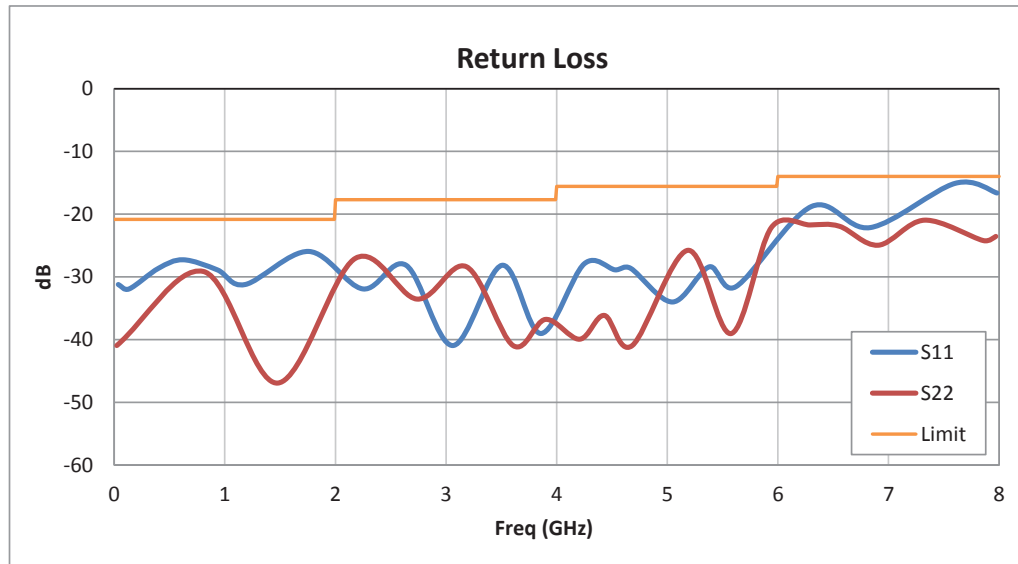
Notes:

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### Typical Performance Data



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20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 8 GHz Rated to 150 Watts, Heatsink 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: [20 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Directional Up to 8 GHz Rated to 150 Watts, Heatsink Body, 1.5 VSWR SA8N150-20](https://www.fairviewmicrowave.com/20db-fixed-attenuator-n-male-n-female-150-watts-sa8n150-20-p.aspx)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-n-male-n-female-150-watts-sa8n150-20-p.aspx>

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