

3 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.55 VSWR

SA18N507-03



Features

- Directional
- DC to 18 GHz Frequency Range
- Attenuation 3 ± 1.5 dB
- Max Power 50 Watts (CW)
- VSWR < 1.55:1

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 SA18N507-03 is a 3 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 50 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		18	GHz
Impedance		50		Ohms
Nominal Attenuation		3		dB
VSWR			1.55:1	
Input Power, CW			50	Watts
derated linearly to 10W at +125°C				
Input Power, Peak			500	Watts
5μs pulse, 0.05% duty cycle				
Reverse Power, CW			5	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12.4	12.4 to 18			GHz
VSWR, Max	1.25:1	1.35:1	1.55:1			
Attenuation Accuracy, Typ	1	1.25	1.5			dB

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Mechanical Specifications

Size	
Length	4.75 in [120.65 mm]
Width/Diameter	3 in [76.2 mm]
Height	3 in [76.2 mm]
Weight	1.6385 lbs [743.21 g]
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
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature	
Operating Range	-65 to +125 deg C

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

Plotted and Other Data

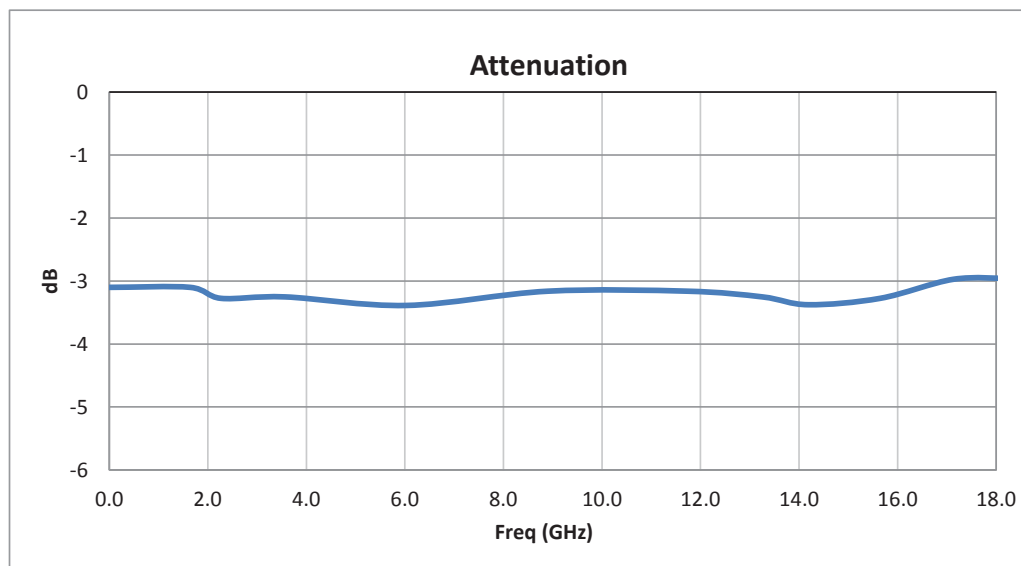
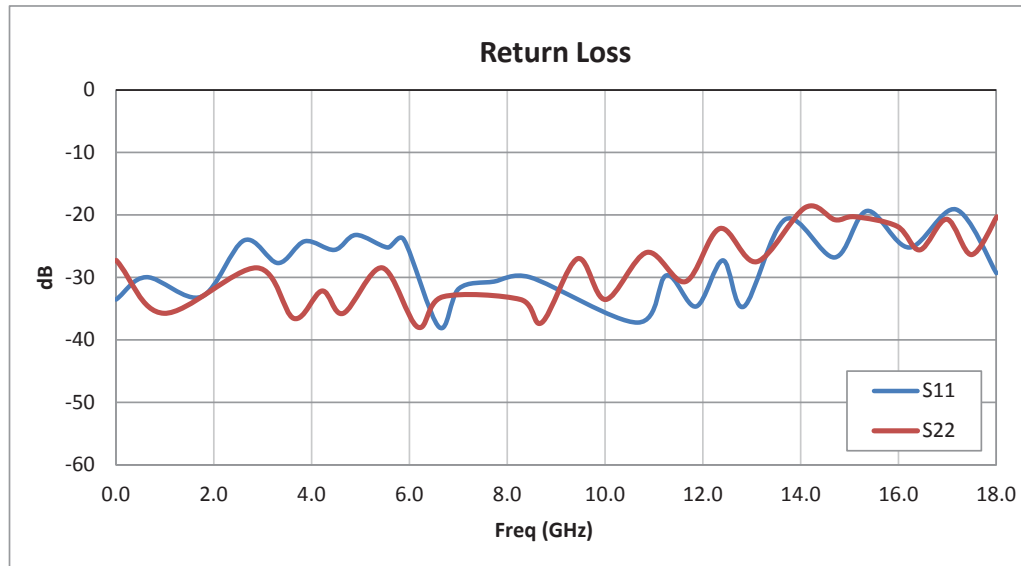
Notes:

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Typical Performance Data



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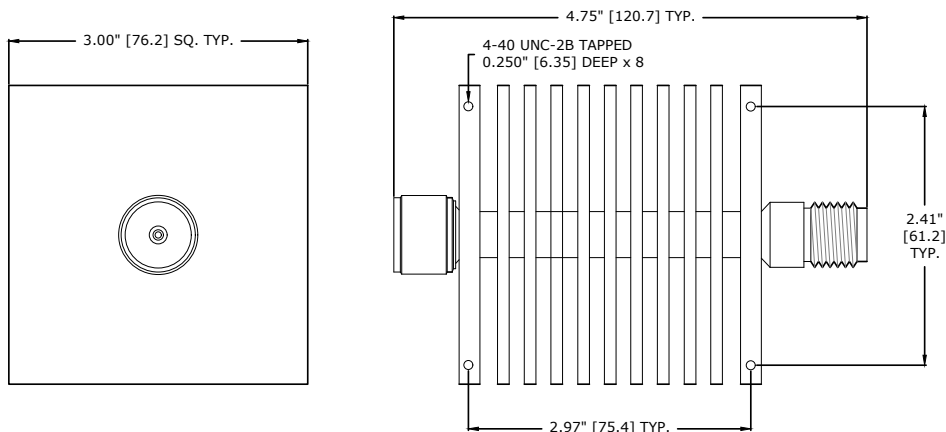
For additional information on this product, please click the following link: [3 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Directional Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.55 VSWR SA18N507-03](https://www.fairviewmicrowave.com/3db-fixed-attenuator-n-male-n-female-50-watts-sa18n507-03-p.aspx)

URL: <https://www.fairviewmicrowave.com/3db-fixed-attenuator-n-male-n-female-50-watts-sa18n507-03-p.aspx>

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SA18N507-03 CAD Drawing

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TITLE	DWG NO		CAGE CODE		
	SA18N507-03		3FKR5		
CAD FILE		012616	SHEET	SCALE	N/A
				SIZE	A
					5568