

20 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.35 VSWR



SA18S50W-20

Features

- Bidirectional
- DC to 18 GHz Frequency Range
- Attenuation 20±1.5 dB
- Max Power 50 Watts (CW)
- VSWR < 1.35:1

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 SA18S50W-20 is a 20 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 50 Watts. The versatile coaxial package uses SMA male to SMA 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		20		dB
Attenuation Accuracy			±1.5	dB
VSWR			1.35:1	
Input Power, CW			50	Watts
rated at +25°C, derated linearly to 5W at +125°C				
Input Power, Peak			1	kWatts
5µs pulse, 2.5% duty cycle				

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

Mechanical Specifications

Size

Length	4.78 in [121.41 mm]
Width/Diameter	1.5 in [38.1 mm]
Height	0 in [0 mm]
Weight	0.3773 lbs [171.14 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

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Configuration

Design Fixed, Bidirectional
Package Style Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Connector Specification	MIL-STD-348A	MIL-STD-348A
Contact Material and Plating	Passivated Stainless Steel	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature

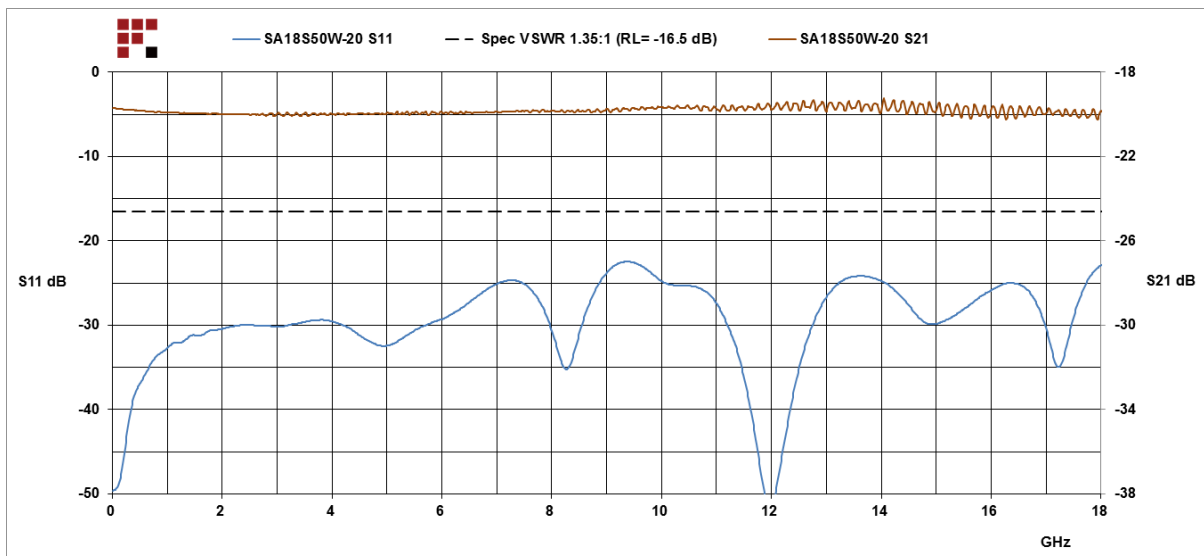
Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data



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20 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.35 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.

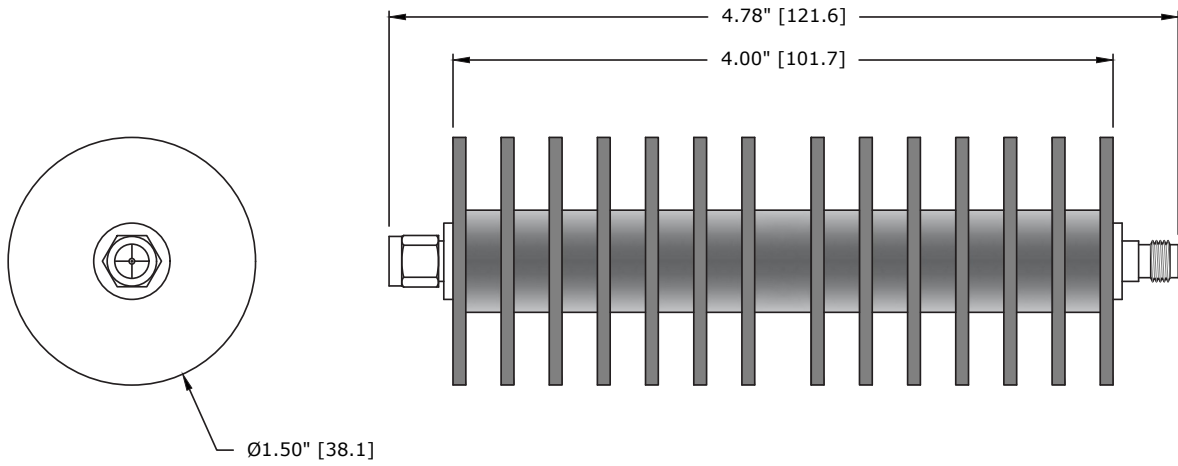
For additional information on this product, please click the following link: [20 dB Fixed Attenuator SMA Male \(Plug\) to SMA Female \(Jack\) Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.35 VSWR SA18S50W-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-sma-male-sma-female-50-watts-sa18s50w-20-p.aspx>

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SA18S50W-20 CAD Drawing

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TITLE	DWG NO		CAGE CODE		
	SA18S50W-20		3FKR5		
CAD FILE	111715	SHEET	SCALE	N/A	SIZE A 5568