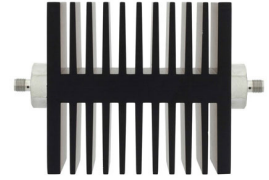


10 dB Fixed Attenuator SMA Female (Jack) to  
SMA Female (Jack) Directional Up to 18 GHz  
Rated to 50 Watts, Heatsink Body, 1.6 VSWR



## SA18SFSF50W-10

### Features

- Design: Fixed, Directional Attenuator
- Connector 1: SMA Female
- Connector 2: SMA Female
- Body Material and Plating: Black Anodized Aluminum Heatsink

### Applications

### 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 SA18SFSF50W-10 is a 10 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 50 Watts. The versatile coaxial package uses 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		10		dB
VSWR			1.6:1	
Input Power, CW			50	Watts
Input Power, Peak			500	Watts

### Specifications by Frequency

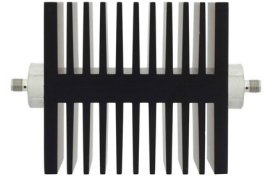
Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12.4	12.4 to 18			GHz
VSWR, Max	1.3:1	1.45:1	1.6:1			
Attenuation Accuracy, Typ	0.75	0.75	1.25			dB

### Mechanical Specifications

#### Size

Length	3.22 in [81.79 mm]
Width/Diameter	3 in [76.2 mm]
Height	3 in [76.2 mm]
Weight	1.665 lbs [755.23 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

10 dB Fixed Attenuator SMA Female (Jack) to  
SMA Female (Jack) Directional Up to 18 GHz  
Rated to 50 Watts, Heatsink Body, 1.6 VSWR



## SA18SFSF50W-10

Configuration		
Design	Fixed, Directional	
Connectors		
Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Outer Conductor Material and Plating		Stainless Steel, Passivated
Coupling Nut Material and Plating	Stainless Steel, Passivated	
Coupling Nut Plating Specification	Stainless Steel	
Hex Size	11/16 In.	11/16 In.
Body Material and Plating	Stainless Steel, Passivated	Stainless Steel, Passivated

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-55 to +125 deg C

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

### Plotted and Other Data

Notes:

### Typical Performance Data

10 dB Fixed Attenuator SMA Female (Jack) to SMA Female (Jack) Directional Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.6 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.

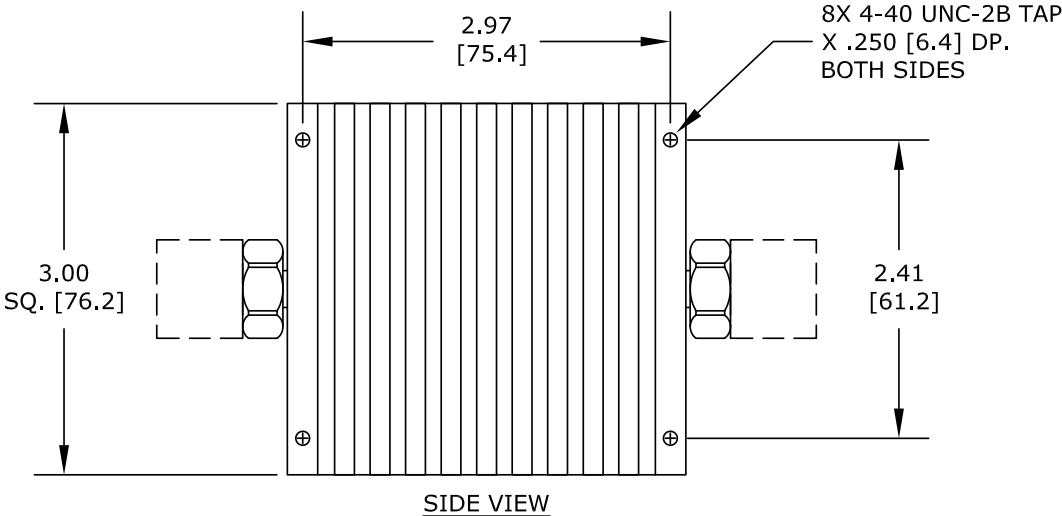
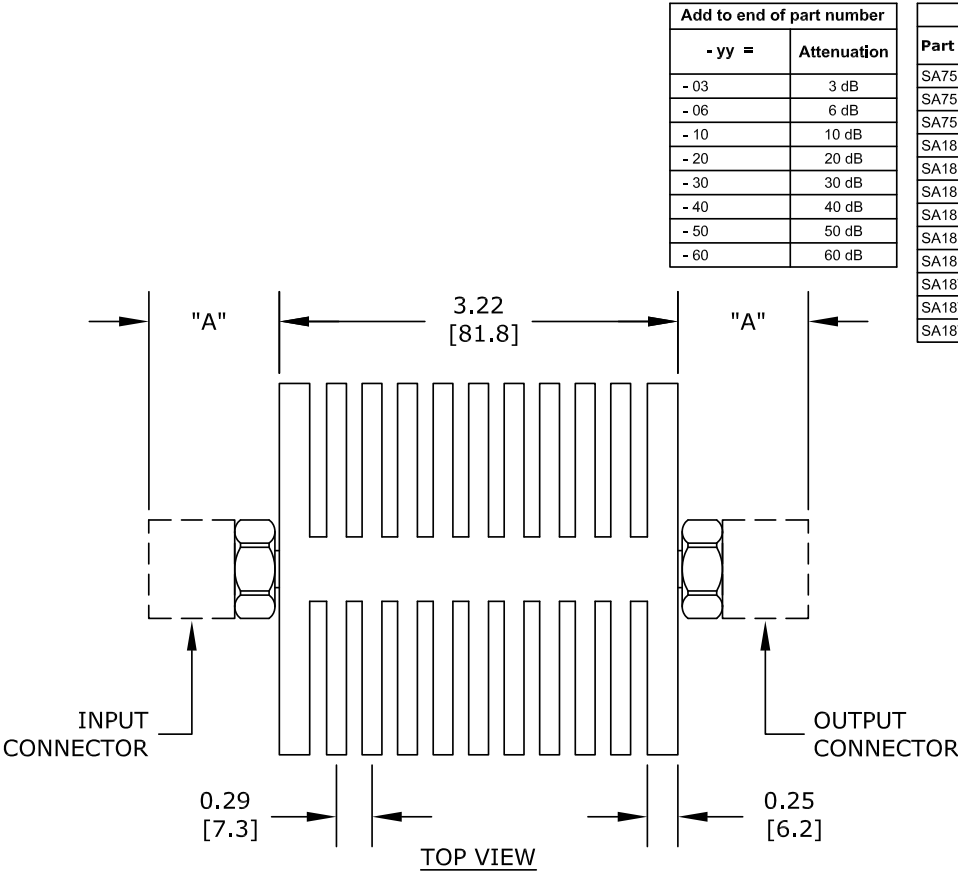
For additional information on this product, please click the following link: [10 dB Fixed Attenuator SMA Female \(Jack\) to SMA Female \(Jack\) Directional Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.6 VSWR SA18SFSF50W-10](#)

URL: <https://www.fairviewmicrowave.com/10db-fixed-attenuator-sma-female-sma-female-50-watts-sa18sfsf50w-10-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

SA18SFSF50W-10 CAD Drawing

10 dB Fixed Attenuator SMA Female (Jack) to SMA Female (Jack) Directional  
Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.6 VSWR



Add to end of part number	
- yy =	Attenuation
- 03	3 dB
- 06	6 dB
- 10	10 dB
- 20	20 dB
- 30	30 dB
- 40	40 dB
- 50	50 dB
- 60	60 dB

Part Number Configuration		
Part Number	Input Connector	Output Connector
SA75DFDM50W	7/16 Female	7/16 Male
SA75DMD50W	7/16 Male	7/16 Female
SA75DFDF50W	7/16 Female	7/16 Female
SA18NFM50W	N Female	N Male
SA18NMNF50W	N Male	N Female
SA18NFMF50W	N Female	N Female
SA18SFSM50W	SMA Female	SMA Male
SA18SMSF50W	SMA Male	SMA Female
SA18SFSF50W	SMA Female	SMA Female
SA18TFTM50W	TNC Female	TNC Male
SA18TMTF50W	TNC Male	TNC Female
SA18TFTF50W	TNC Female	TNC Female

Table of Information	
Connector Type	DIM "A" (REF.)
SMA Male	0.7800
SMA Female	0.6300
TNC Male	0.9600
TNC Female	1.0600
N Female	1.0900
N Male	1.1300
7/16 Male	1.2800
7/16 Female	1.3200

FAIRVIEW MICROWAVE INC.  
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

TITLE

DWG NO

SA18XXXX50w-yy

CAGE CODE

3FKR5

CAD FILE

063014

SHEET

SCALE

N/A

SIZE

A

2233