

30 dB Fixed Attenuator SMA Female (Jack) to SMA Male (Plug) Directional Up to 6 GHz Rated to 100 Watts, Heatsink Body, 1.45 VSWR



SA6SFSM100W-30

Features

- DC to 6 GHz Frequency Range
- SMA Connectorized Design
- Attenuation 30 dB $\pm$ 1.5 dB
- Max Power 100 Watts (CW)
- Max VSWR of 1.45:1

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 SA6SFSM100W-30 is a 30 dB Fixed Attenuator that operates from DC to 6 GHz and is rated to 100 Watts. The versatile coaxial package uses SMA female to SMA male 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		6	GHz
Impedance		50		Ohms
Nominal Attenuation		30		dB
VSWR			1.45:1	
Input Power, CW			100	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 4	4 to 6			GHz
VSWR, Max	1.2:1	1.35:1	1.45:1			
Attenuation Accuracy, Typ	1	1.25	1.5			dB

Mechanical Specifications

Size

Length	4.9 in [124.46 mm]
Width/Diameter	3.8 in [96.52 mm]
Height	2.7 in [68.58 mm]
Weight	3 lbs [1.36 kg]
Body Material and Plating	Black Anodized Aluminum Heatsink

30 dB Fixed Attenuator SMA Female (Jack) to
SMA Male (Plug) Directional Up to 6 GHz Rated
to 100 Watts, Heatsink Body, 1.45 VSWR



SA6SFSM100W-30

Configuration	
Design	Fixed, Directional

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Male
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Coupling Nut Material and Plating		Stainless Steel, Passivated
Body Material and Plating	Stainless Steel, Passivated	Stainless Steel, Passivated

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

30 dB Fixed Attenuator SMA Female (Jack) to SMA Male (Plug) Directional Up to 6 GHz Rated to 100 Watts, Heatsink Body, 1.45 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: [30 dB Fixed Attenuator SMA Female \(Jack\) to SMA Male \(Plug\) Directional Up to 6 GHz Rated to 100 Watts, Heatsink Body, 1.45 VSWR SA6SFSM100W-30](#)

URL: <https://www.fairviewmicrowave.com/30db-fixed-attenuator-sma-female-sma-male-100-watts-sa6sfsm100w-30-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.

SA6SFSM100W-30 CAD Drawing

30 dB Fixed Attenuator SMA Female (Jack) to SMA Male (Plug) Directional
Up to 6 GHz Rated to 100 Watts, Heatsink Body, 1.45 VSWR

