20 dB Fixed Attenuator SMA Male (Plug) to SMA Male (Plug) Directional Up to 3 GHz Rated to 300 Watts, Heatsink Body, 1.4 VSWR



SA3SMM300W-20

Features

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 SA3SMM300W-20 is a 20 dB Fixed Attenuator that operates from DC to 3 GHz and is rated to 300 Watts. The versatile coaxial package uses SMA male connectors. The Black Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		1.25		dB
VSWR			1.4:1	
Input Power, CW			300	Watts
Input Power, Peak			2.5	kWatts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 1.5	1.5 to 3				GHz
VSWR, Max	1.2:1	1.4:1				
Attenuation Accuracy, Typ	1	1.25				dB

Mechanical Specifications

Size	
Length	0 in [0 mm]
Width/Diameter	6.2 in [157.48 mm]
Height	6.3 in [160.02 mm]
Weight	lbs [0 g]
Body Material and Plating	Black Aluminum Heatsink

20 dB Fixed Attenuator SMA Male (Plug) to SMA Male (Plug) Directional Up to 3 GHz Rated to 300 Watts, Heatsink Body, 1.4 VSWR

SA3SMM300W-20

Configuration	
Design	Fixed, Directional

Connectors

Description	Connector 1	Connector 2
Туре	SMA Male	SMA Male
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Hex Size	5/16 Inch	5/16 Inch
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm
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

20 dB Fixed Attenuator SMA Male (Plug) to SMA Male (Plug) Directional Up to 3 GHz Rated to 300 Watts, Heatsink Body, 1.4 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 Male (Plug) Directional Up to 3 GHz Rated to 300 Watts, Heatsink Body, 1.4 VSWR SA3SMM300W-20

URL: https://www.fairviewmicrowave.com/20db-fixed-attenuator-sma-male-sma-male-300-watts-sa3smm300w-20-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 impliment 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.

© 2025 Infinite Electronics, Inc. Fairview Microwave is a registered trademark of Infinite Electronics, Inc.

