

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

SA3SFM300W-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 SA3SFM300W-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 female to 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 |

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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 |
| Outer Conductor Material and Plating | Passivated Stainless Steel | |
| Coupling Nut Material and Plating | | Passivated Stainless Steel |
| Hex Size | | 5/16 Inch |
| Torque | | 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 Female (Jack) 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 Female \(Jack\) to SMA Male \(Plug\) Directional Up to 3 GHz Rated to 300 Watts, Heatsink Body, 1.4 VSWR SA3SFM300W-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-sma-female-sma-male-300-watts-sa3sfm300w-20-p.aspx>

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