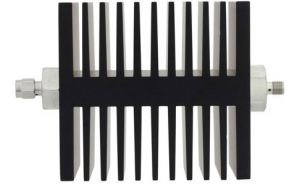


10 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Directional Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.6 VSWR



## SA18SMSF50W-10

### 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 SA18SMSF50W-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 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 |         | 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

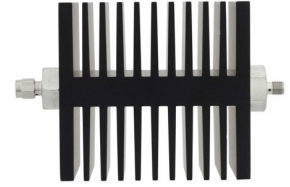
#### Size

|                           |                                  |
|---------------------------|----------------------------------|
| Length                    | 4.01 in [101.85 mm]              |
| Width/Diameter            | 3 in [76.2 mm]                   |
| Height                    | 3 in [76.2 mm]                   |
| Weight                    | 1.796 lbs [814.65 g]             |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

#### Configuration

|        |                    |
|--------|--------------------|
| Design | Fixed, Directional |
|--------|--------------------|

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



## SA18SMSF50W-10

### Connectors

| Description                          | Connector 1                 | Connector 2                 |
|--------------------------------------|-----------------------------|-----------------------------|
| Type                                 | SMA Male                    | 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

#### Temperature

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 Male (Plug) 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 Male \(Plug\) to SMA Female \(Jack\) Directional Up to 18 GHz Rated to 50 Watts, Heatsink Body, 1.6 VSWR SA18SMSF50W-10](#)

URL: <https://www.fairviewmicrowave.com/10db-fixed-attenuator-sma-male-sma-female-50-watts-sa18smsf50w-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.