

50 dB Fixed Attenuator 7/16 Male (Plug) to  
7/16 Female (Jack) Directional Up to 3 GHz Rated  
to 300 Watts, Heatsink Body, 1.4 VSWR



## SA3DMF300W-50

### 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 SA3DMF300W-50 is a 50 dB Fixed Attenuator that operates from DC to 3 GHz and is rated to 300 Watts. The versatile coaxial package uses 7/16 DIN male to 7/16 DIN female 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  |         | 50      |         | dB     |
| Attenuation Accuracy |         | 1.5     |         | 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 | 1.25      | 1.5      |    |    |    | 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 |

50 dB Fixed Attenuator 7/16 Male (Plug) to  
7/16 Female (Jack) Directional Up to 3 GHz Rated  
to 300 Watts, Heatsink Body, 1.4 VSWR

## SA3DMF300W-50



### Configuration

Design

Fixed, Directional

### Connectors

| Description                       | Connector 1       | Connector 2     |
|-----------------------------------|-------------------|-----------------|
| Type                              | 7/16 DIN Male     | 7/16 DIN Female |
| Contact Material and Plating      | Brass, Silver     | Brass, Silver   |
| Coupling Nut Material and Plating | Brass, Silver     |                 |
| Hex Size                          | 7/16 Inch         |                 |
| Torque                            | 25 in-lbs 2.83 Nm |                 |
| Body Material and Plating         | Brass, Silver     | Brass, Silver   |

### 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

50 dB Fixed Attenuator 7/16 Male (Plug) to 7/16 Female (Jack) 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: [50 dB Fixed Attenuator 7/16 Male \(Plug\) to 7/16 Female \(Jack\) Directional Up to 3 GHz Rated to 300 Watts, Heatsink Body, 1.4 VSWR SA3DMF300W-50](#)

URL: <https://www.fairviewmicrowave.com/50db-fixed-attenuator-7-16-male-7-16-female-300-watts-sa3dmf300w-50-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.