

10 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 18 GHz Rated to 25 Watts, Heatsink Body, 1.35 VSWR



**SA18S25W-10**

**Features**

- Bidirectional
- DC to 18 GHz Frequency Range
- Attenuation 10±1 dB
- Max Power 25 Watts (CW)
- VSWR < 1.35:1

**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 SA18S25W-10 is a 10 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 25 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     |
| Attenuation Accuracy                               |         | 1       |         | dB     |
| VSWR   |         |         | 1.35:1  |        |
| Input Power, CW                                    |         |         | 25      | Watts  |
| rated at +25°C, derated linearly to 2.5W at +125°C |         |         |         |        |
| Input Power, Peak                                  |         |         | 1       | kWatts |
| 5µs pulse, 2.5% duty cycle                         |         |         |         |        |

Electrical Specification Notes:  
Values at +25°C, sea level.

**Mechanical Specifications**

**Size**

- Length 2.7 in [68.58 mm]
- Width/Diameter 1.5 in [38.1 mm]
- Height 0 in [0 mm]
- Weight 0.1852 lbs [84.01 g]
- Body Material and Plating Black Anodized Aluminum Heatsink

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### Configuration

Design Fixed, Bidirectional  
Package Style Connectorized Module

### Connectors

| Description                  | Connector 1                | Connector 2                |
|------------------------------|----------------------------|----------------------------|
| Type                         | SMA Male                   | SMA Female                 |
| Connector Specification      | MIL-STD-348A               | MIL-STD-348A               |
| Contact Material and Plating | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Body Material and Plating    | Passivated Stainless Steel | Passivated Stainless Steel |

### Environmental Specifications

#### Temperature

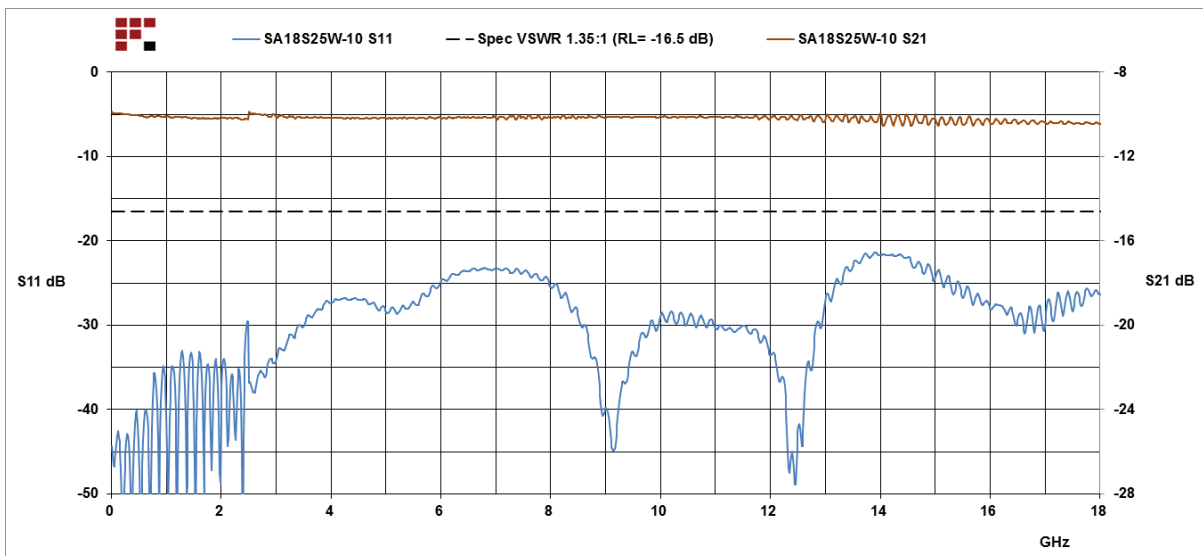
Operating Range -55 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

### Typical Performance Data



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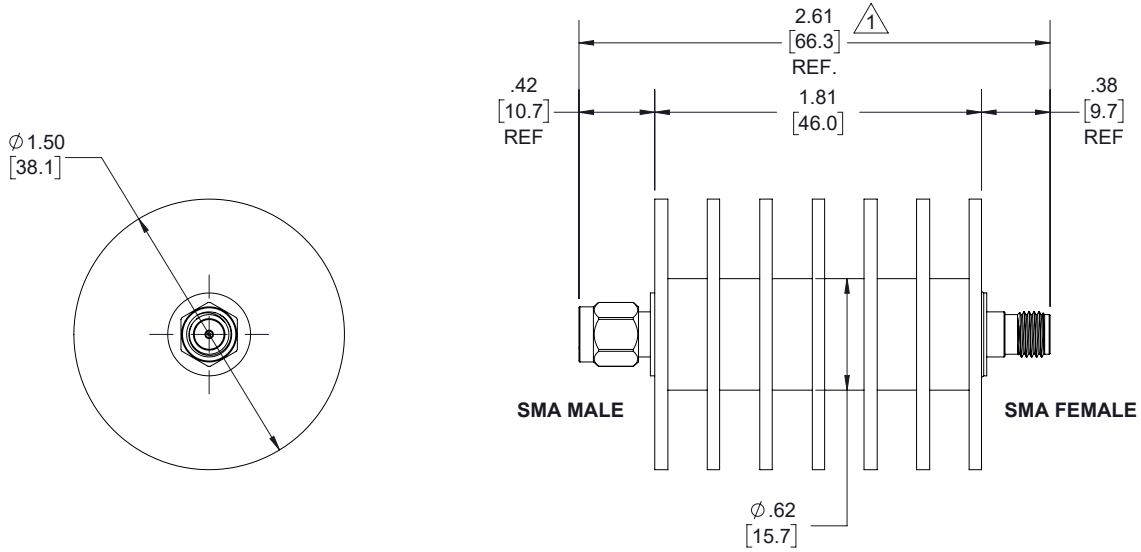
For additional information on this product, please click the following link: [10 dB Fixed Attenuator SMA Male \(Plug\) to SMA Female \(Jack\) Up to 18 GHz Rated to 25 Watts, Heatsink Body, 1.35 VSWR SA18S25W-10](#)

URL: <https://www.fairviewmicrowave.com/10db-fixed-attenuator-sma-male-sma-female-25-watts-sa18s25w-10-p.aspx>

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# SA18S25W-10 CAD Drawing

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LABEL:

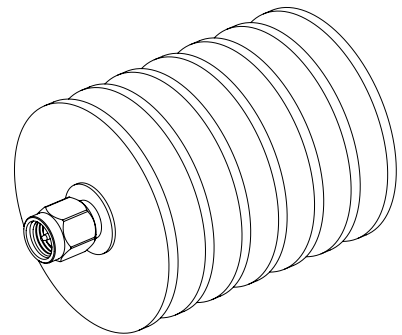
**FAIRVIEW MICROWAVE**  
**SA18S25W-10**

STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

NOTES:

- OVERALL LENGTH WILL VARY SLIGHTLY  
MAX LENGTH IS 2.70 [68.5].



\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

|  |   |  |
|--|---|--|
| <p><b>Fairview Microwave</b><br/>RF COMPONENTS ON DEMAND. <i>Done!</i></p> | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |  |
|  | DWG NO<br><p style="text-align: center;"><b>SA18S25W-10</b></p>   | CAGE CODE<br><p style="text-align: center;"><b>3FKR5</b></p> |
|  | CAD FILE 03/27/19    SHEET 1 OF 1    SCALE N/A    SIZE A    7361  |  |