

3 dB Fixed Attenuator N Male To N Female
Directional Up To 8 GHz Rated To 150 Watts With
Black Aluminum Heatsink Body

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 SA8N150-03 is a 3 dB Fixed Attenuator that operates from DC to 8 GHz and is rated to 150 Watts. The versatile coaxial package uses type N male to type N female connectors and is also REACH and RoHS compliant. The Black Anodized Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions.



Features:

- Directional
- DC to 8 GHz Frequency Range
- Attenuation 3±1.25 dB
- Max Power 150 Watts (CW)
- VSWR < 1.5:1

Applications:

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production systems

Electrical Specifications

| Description | Min | Typ | Max | Units |
|--|-----|-----|-------|--------|
| Frequency Range | DC | | 8 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 3 | | dB |
| VSWR | | | 1.5:1 | |
| Input Power, CW derated linearly to 15W at +125°C | | | 150 | Watts |
| Input Power, Peak 5µs pulse, 0.1% duty cycle | | | 2.5 | KWatts |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---------------------|---------|--------|--------|--------|----|-------|
| Range | DC to 2 | 2 to 4 | 4 to 6 | 6 to 8 | | GHz |
| VSWR, Max | 1.2:1 | 1.3:1 | 1.4:1 | 1.5:1 | | |
| Atten Accuracy, Typ | ±0.5 | ±0.75 | ±0.75 | ±1.25 | | dB |

Mechanical Specifications

| | |
|---------------------------|----------------------------------|
| Size | |
| Length | 6.39 in [162.31 mm] |
| Width/Diameter | 5.8 in [147.32 mm] |
| Height | 4.21 in [106.93 mm] |
| Weight | 4.2355 lbs [1.92 Kg] |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

Configuration

| | |
|---------------|----------------------|
| Design | Fixed, Directional |
| Package Style | Connectorized Module |

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Connectors

| Description | Connector 1 | Connector 2 |
|----------------------------|--------------------------|--------------------------|
| Type | N Male | N Female |
| Connector Spec. | MIL-STD-348 | MIL-STD-348 |
| Contact Material & Plating | Beryllium Copper, Silver | Beryllium Copper, Silver |
| Body Material & Plating | Stainless Steel, Silver | Stainless Steel, Silver |

Mechanical Specification Notes:
 Connector interface in accordance with MIL-STD-348 and MIL-PRF-39012

Environmental Specifications

Temperature

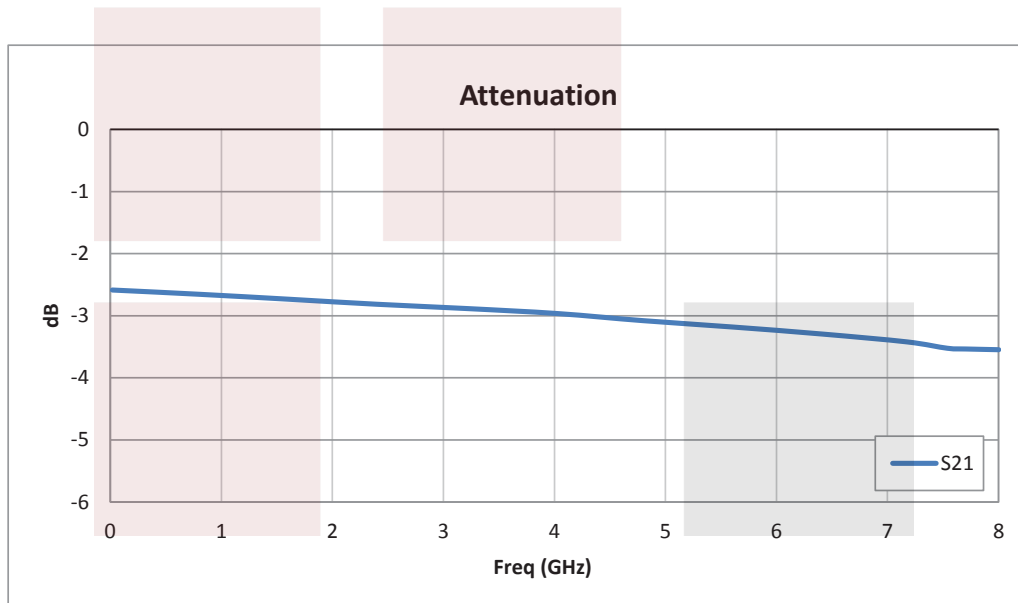
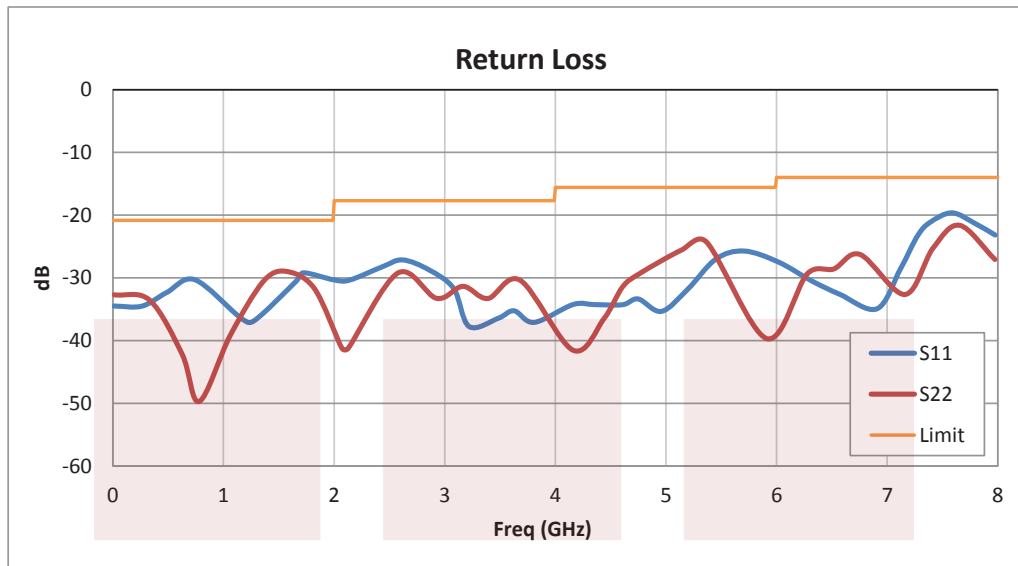
Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data

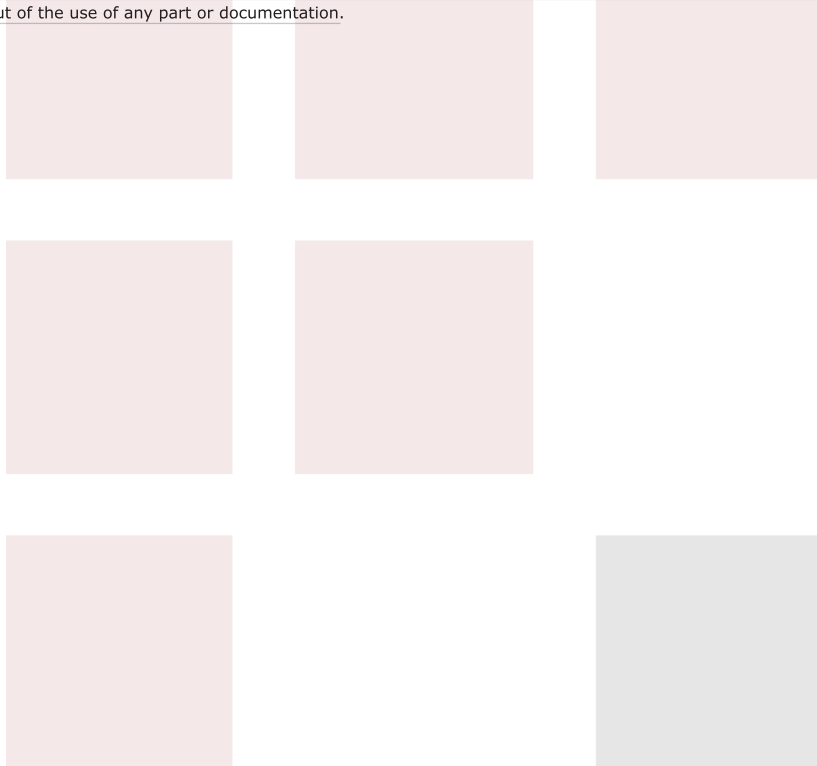


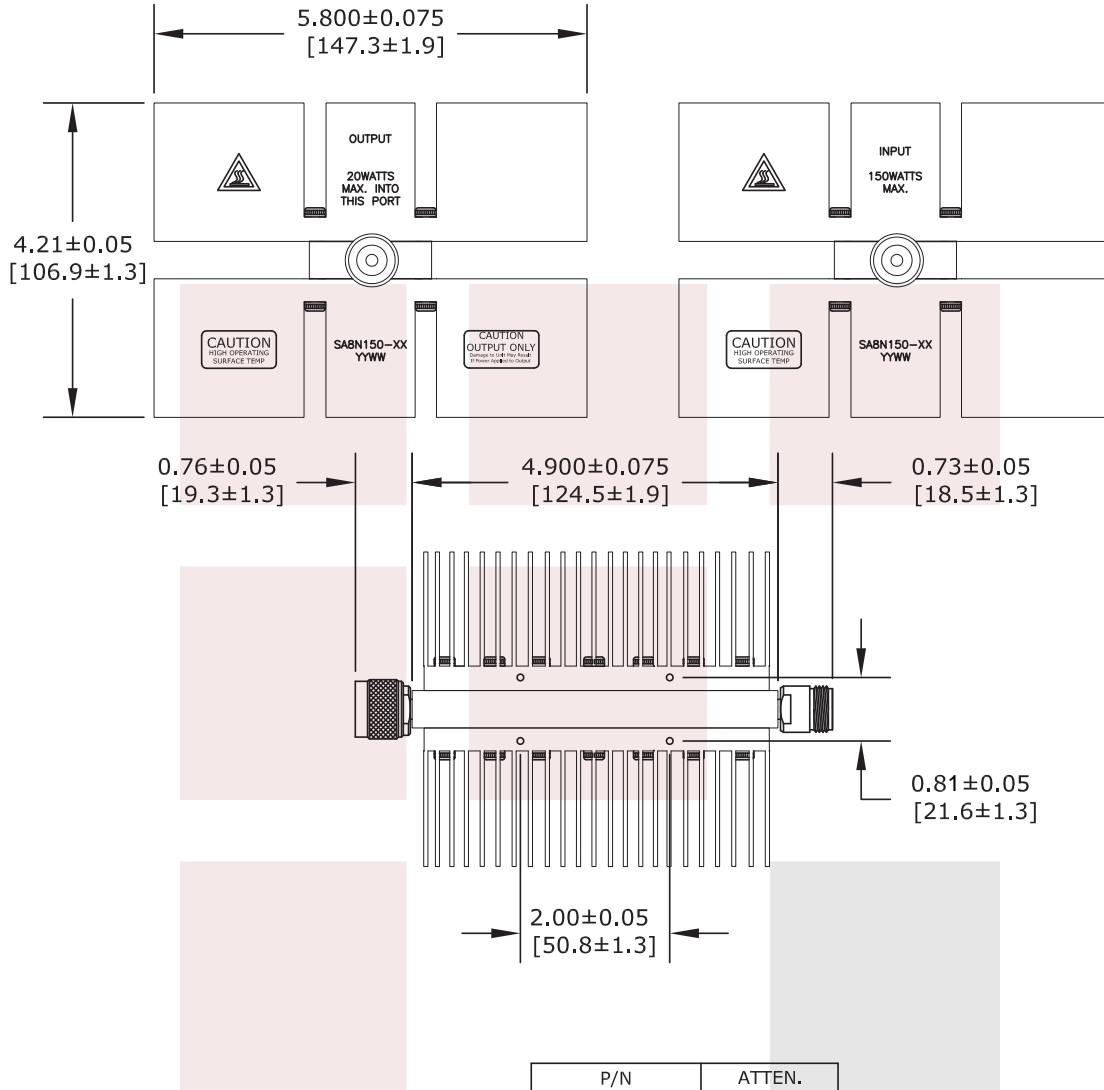
3 dB Fixed Attenuator N Male To N Female Directional Up To 8 GHz Rated To 150 Watts With Black Aluminum Heatsink Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [3 dB Fixed Attenuator N Male To N Female Directional Up To 8 GHz Rated To 150 Watts With Black Aluminum Heatsink Body SA8N150-03](#)

URL: <https://www.fairviewmicrowave.com/3db-fixed-attenuator-n-male-n-female-150-watts-sa8n150-03-p.aspx>

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| STANDARD TOLERANCES | |
|---------------------|---------|
| .X | ±0.05" |
| .XX | ±0.03" |
| .XXX | ±0.010" |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

| | | | | | |
|--|--------|---|-------|--------------------|-------------|
| FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM | | NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm]. | | | |
| TITLE 3 dB Fixed Attenuator N Male To N Female Directional Up To 8 GHz Rated To 150 Watts With Black Aluminum Heatsink Body | | DWG NO SA8N150 | | CAGE CODE 3FKR5 | |
| CAD FILE | 031616 | SHEET | SCALE | N/A | SIZE A 3045 |