

## SA8N150-40

### **Features**

- Directional
- · DC to 8 GHz Frequency Range
- Attenuation 40±2.25 dB

## **Applications**

- · Instrumentation
- · Precision measurements

- · Max Power 150 Watts (CW)
- VSWR < 1.5:1</li>
- · 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 SA8N150-40 is a 40 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. 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      |         | 8       | GHz    |
| Impedance                         |         | 50      |         | Ohms   |
| Nominal Attenuation               |         | 40      |         | dB     |
| VSWR                              |         |         | 1.5:1   |        |
| Input Power, CW                   |         |         | 150     | Watts  |
| derated linearly to 15W at +125°C |         |         |         |        |
| Input Power, Peak                 |         |         | 2.5     | kWatts |
| 5µs pulse, 0.1% duty cycle        |         |         |         |        |

### **Specifications by Frequency**

| Description               | F1      | F2     | F3     | F4     | F5 | Units |
|---------------------------|---------|--------|--------|--------|----|-------|
| Frequency 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  |    |       |
| Attenuation Accuracy, Typ | 1       | 1.25   | 1.5    | 2.25   |    | dB    |

### **Mechanical Specifications**

Size

Length Width/Diameter 6.39 in [162.31 mm] 5.8 in [147.32 mm]





## SA8N150-40

 Height
 4.21 in [106.93 mm]

 Weight
 0.888 lbs [402.79 g]

Body Material and Plating Black Anodized Aluminum Heatsink

Configuration

Design Fixed, Directional Package Style Connectorized Module

### Connectors

| Description                  | Connector 1              | Connector 2              |  |  |
|------------------------------|--------------------------|--------------------------|--|--|
| Туре                         | N Male                   | N Female                 |  |  |
| Connector Specification      | MIL-STD-348              | MIL-STD-348              |  |  |
| Contact Material and Plating | Beryllium Copper, Silver | Beryllium Copper, Silver |  |  |
| Body Material and 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)

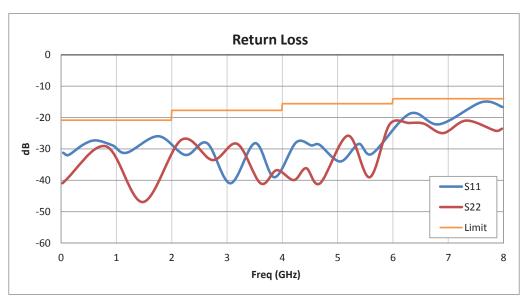
## **Plotted and Other Data**

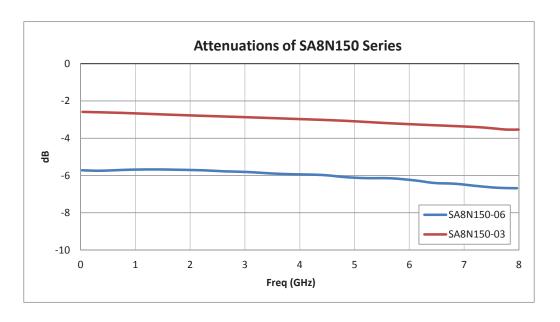
Notes:



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## **Typical Performance Data**









## SA8N150-40

40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 8 GHz Rated to 150 Watts, Heatsink Body, 1.5 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: 40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 8 GHz Rated to 150 Watts, Heatsink Body, 1.5 VSWR SA8N150-40

URL: https://www.fairviewmicrowave.com/40db-fixed-attenuator-n-male-n-female-150-watts-sa8n150-40-p.aspx

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