

# **SA4N508-01 DATA SHEET**

## 1 dB Fixed Attenuator N Male To N Female Up To 4 GHz Rated To 50 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 selections and ships them same day. The SA4N508-01 is a 1 dB Fixed Attenuator that operates from DC to 4 GHz and is rated to 50 Watts. The versatile coaxial package uses N male to 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.

## **Electrical Specifications**

Description	Min	•	Тур	Max	Units
Frequency Range	DC			4	GHz
Impedance			50		Ohms
Nominal Attenuation			1		dB
Attenuation Accuracy		±	0.75		dB
VSWR				1.35:1	
Passive Intermodulation				-100	dBc
Input Power, CW derated linearly to 5W	@125°C			50	Watts
Input Power, Peak 5µs pulse, 0.5% duty	cycle			10	KWatts

**Electrical Specification Notes:** 

Passive intermodulation specified at 910MHz with two input signals at 935MHz and 960MHz with average carrier power levels of +43dBm each.

## **Mechanical Specifications**

Size

Lenath 5.12 in [130.05 mm] Width/Diameter 2.36 in [59.94 mm] 2.36 in [59.94 mm] Height Weight 1.124 lbs [509.84 g]

Black Anodized Aluminum Heatsink Body Material and Plating

Configuration

Fixed, Bidirectional Design Connectorized Package Style



### Features:

- Bidirectional
- DC to 4 GHz Frequency Range
- Attenuation 1±0.75 dB
- Max Power 50 Watts (CW)
- VSWR < 1.35:1</li>

## **Applications:**

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

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#### **Connectors**

Description	Connector 1	Connector 2			
Туре	N Male	N Female			
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold			
Outer Conductor Material & Plating	Brass, Nickel	Brass, Nickel			
Body Material & Plating	Brass, Nickel	Brass, Nickel			

## **Environmental Specifications**

**Temperature** 

Operating Range -55 to +125 deg C

**Compliance Certifications** (visit www.FairviewMicrowave.com for current document)

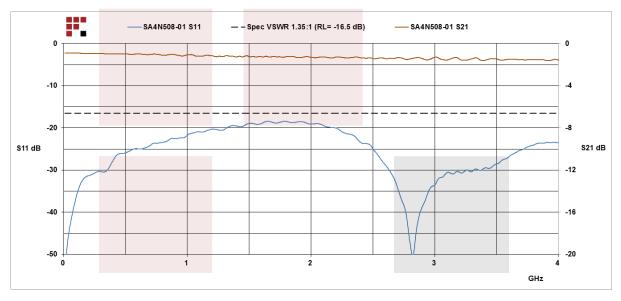
RoHS Compliant Yes

REACH Compliant 12/17/2015

## **Plotted and Other Data**

Notes:

#### **Typical Performance Data**







1 dB Fixed Attenuator N Male To N Female Up To 4 GHz Rated To 50 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.

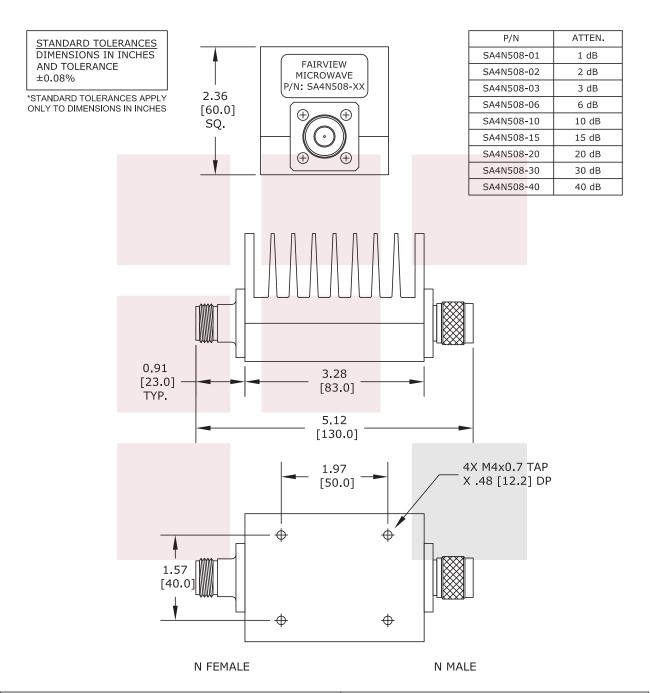
For additional information on this product, please click the following link: 1 dB Fixed Attenuator N Male To N Female Up To 4 GHz Rated To 50 Watts With Black Aluminum Heatsink Body SA4N508-01

URL: http://www.fairviewmicrowave.com/1db-fixed-attenuator-n-male-n-female-50-watts-sa4n508-01-p.aspx









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].					
1 dB Fixed Attenuator N Male To N Female Up To 4	DWG NO SA4N508			CAGE CODE 3FKR5		
GHz Rated To 50 Watts With Black Aluminum Heatsink Body	CAD FILE 032316	SHEET	SCALE	: N/A	SIZE A	3045