

# 40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 4 GHz Rated to 50 Watts, Heatsink Body, 1.35 VSWR

# SA4N508-40

## **Features**

- Bidirectional
- DC to 4 GHz Frequency Range
- Attenuation 40±0.75 dB

# **Applications**

- · Instrumentation
- · Precision Measurements

- Max Power 50 Watts (CW)
- VSWR < 1.35:1</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 SA4N508-40 is a 40 dB Fixed Attenuator that operates from DC to 4 GHz and is rated to 50 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		4	GHz
Impedance		50		Ohms
Nominal Attenuation		40		dB
Attenuation Accuracy		0.75		dB
VSWR			1.35:1	
Passive Intermodulation			-100	dBc
Input Power, CW			50	Watts
derated linearly to 5W @125°C				
Input Power, Peak			10	kWatts
5µs pulse, 0.5% duty cycle				

**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

 Length
 5.12 in [130.05 mm]

 Width/Diameter
 2.36 in [59.94 mm]

 Height
 2.36 in [59.94 mm]

 Weight
 1.4665 lbs [665.19 g]



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# **SA4N508-40**

Body Material and Plating Black Anodized Aluminum Heatsink

Configuration

Fixed, Bidirectional Design Package Style Connectorized

### **Connectors**

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

# **Environmental Specifications**

**Temperature** 

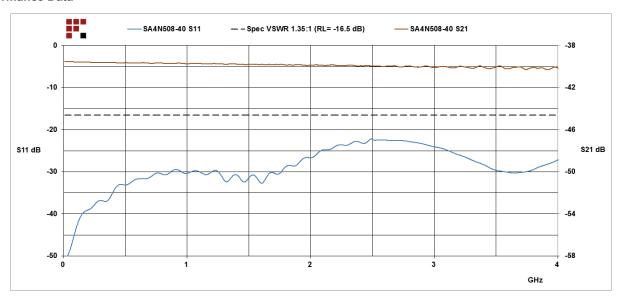
-55 to +125 deg C Operating Range

Compliance Certifications (see product page for current document)

# **Plotted and Other Data**

Notes:

# **Typical Performance Data**







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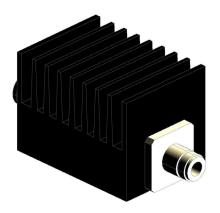
40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 4 GHz Rated to 50 Watts, Heatsink Body, 1.35 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

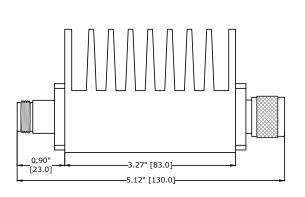
For additional information on this product, please click the following link: 40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 4 GHz Rated to 50 Watts, Heatsink Body, 1.35 VSWR SA4N508-40

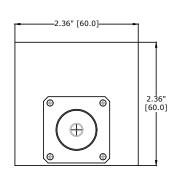
URL: https://www.fairviewmicrowave.com/40db-fixed-attenuator-n-male-n-female-50-watts-sa4n508-40-p.aspx

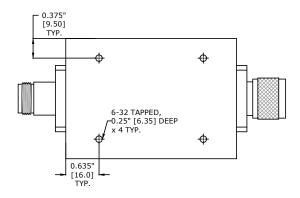
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**SA4N508-40 CAD Drawing**40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 4 GHz Rated to 50 Watts, Heatsink Body, 1.35 VSWR









**BOTTOM VIEW** 

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	DWG NO SA4N508-40			CAGE CODE 3FKR5			
	CAD FILE	011415	SHEET	SCAL	E N/A	SIZE A	5568