

## 40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 8.5 GHz Rated to 150 Watts, Heatsink Body, 1.5 VSWR



### SA8N007-40

#### Features

- Directional
- DC to 8.5 GHz Frequency Range
- Attenuation 40±1 dB
- Max Power 150 Watts (CW)
- VSWR < 1.5:1

#### 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 SA8N007-40 is a 40 dB Fixed Attenuator that operates from DC to 8.5 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		8.5	GHz
Impedance		50		Ohms
Nominal Attenuation		40		dB
VSWR			1.5:1	
Input Power, CW			150	Watts
Input Power, Peak			5	kWatts
5μs pulse, 1.5% duty cycle				

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8.5				GHz
Attenuation Accuracy, Typ	0.5	1				dB

Electrical Specification Notes:

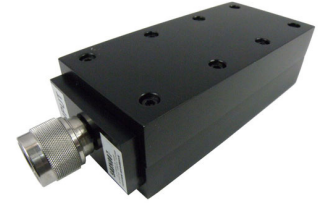
Power Sensitivity: 0.0005 dB/dB/W max./Temperature coefficient: 0.0004 dB/dB/°C max.

#### Mechanical Specifications

##### Size

Length	6.8 in [172.72 mm]
Width/Diameter	2.25 in [57.15 mm]

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**SA8N007-40**

Height	1.5 in [38.1 mm]
Weight	2.0145 lbs [913.76 g]
Body Material and Plating	Black Anodized Aluminum Heatsink
<b>Configuration</b>	
Design	Fixed, Directional
Package Style	Connectorized Module

**Connectors**

Description	Connector 1	Connector 2
Type	N Male	N 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

Mechanical Specification Notes:  
Connectors mate nondestructively with MIL-PRF-39012 connectors.

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-55 to +100 deg C

Environmental Specification Notes:  
Designed to meet the environmental requirements of MIL-STD-3933.

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**

40 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Directional Up to 8.5 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.

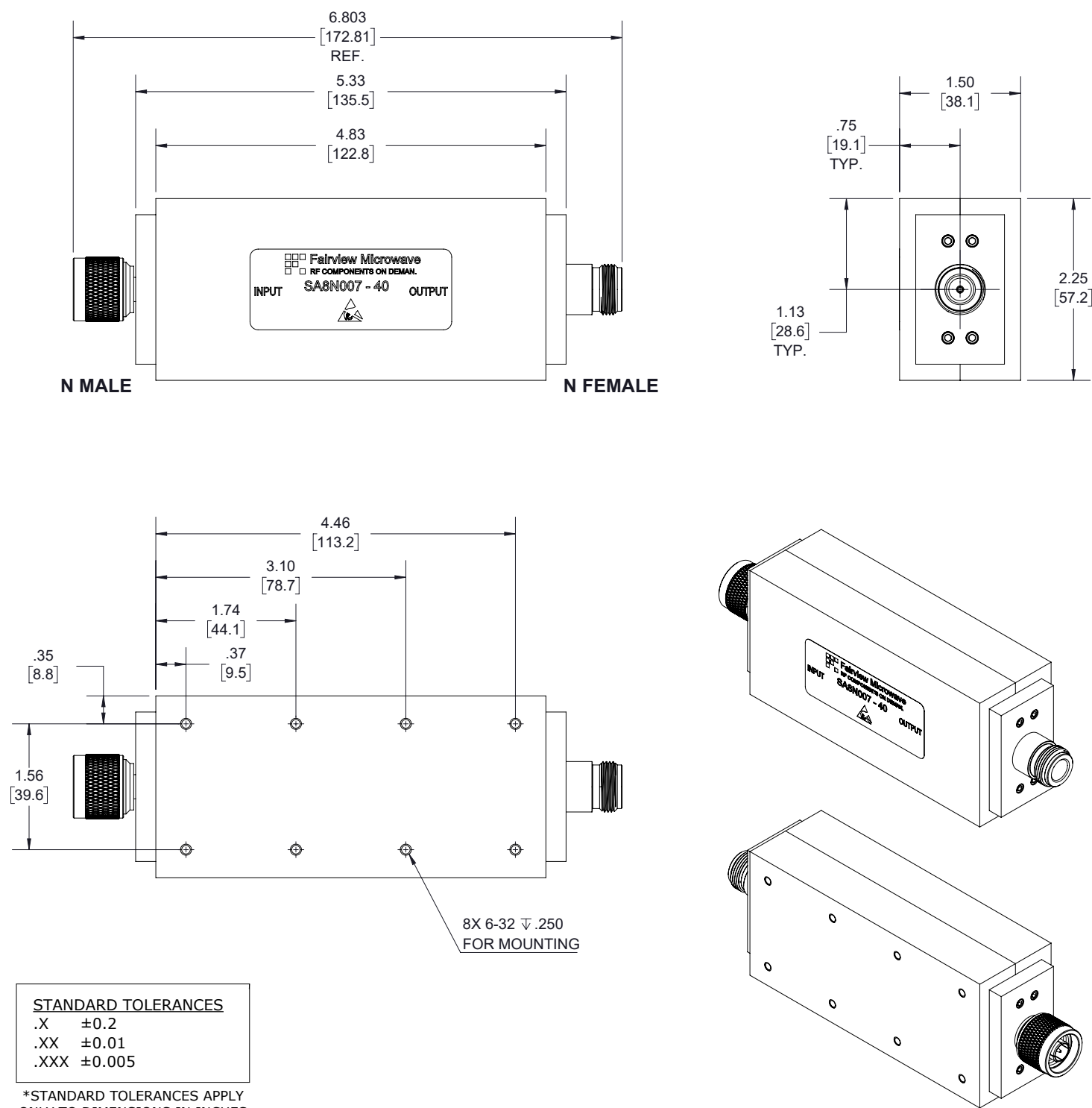
For additional information on this product, please click the following link: [40 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Directional Up to 8.5 GHz Rated to 150 Watts, Heatsink Body, 1.5 VSWR SA8N007-40](#)

URL: <https://www.fairviewmicrowave.com/40db-fixed-attenuator-n-male-n-female-150-watts-sa8n007-40-p.aspx>

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SA8N007-40 CAD Drawing

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STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

TITLE	<b>Fairview Microwave</b> RF COMPONENTS ON DEMAND. <i>Done!</i>		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].			
	DWG NO SA8N007-40		CAGE CODE 3FKR5			
	CAD FILE 10/23/18	SHEET 1 OF 1	SCALE N/A	SIZE A	7361	