

**40 dB Fixed Attenuator N Male to N Female
 Directional Up to 8.5 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 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 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	Typ	Max	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 5µs pulse, 1.5% duty cycle			5	kWatts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 4	4 to 8.5				GHz
Atten 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]
Height	1.5 in [38.1 mm]
Weight	2.0145 lbs [913.76 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

Configuration

Design	Fixed, Directional
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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

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Package Style

Connectorized Module

Connectors

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

Mechanical Specification Notes:

Connectors mate nondestructively with MIL-PRF-39012 connectors.

Environmental Specifications

Temperature

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

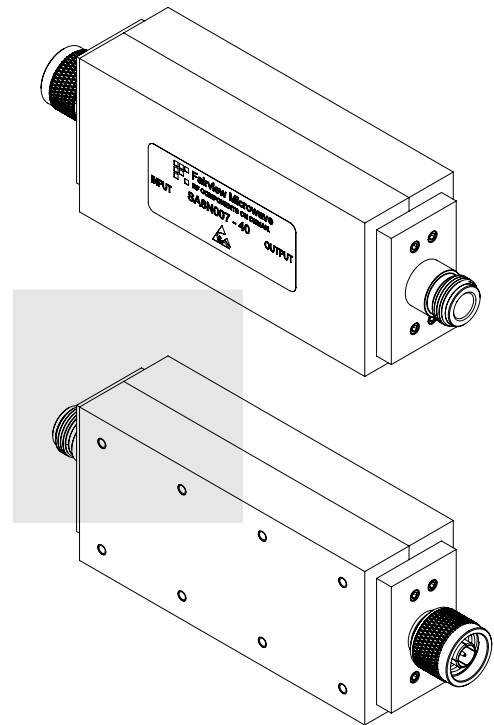
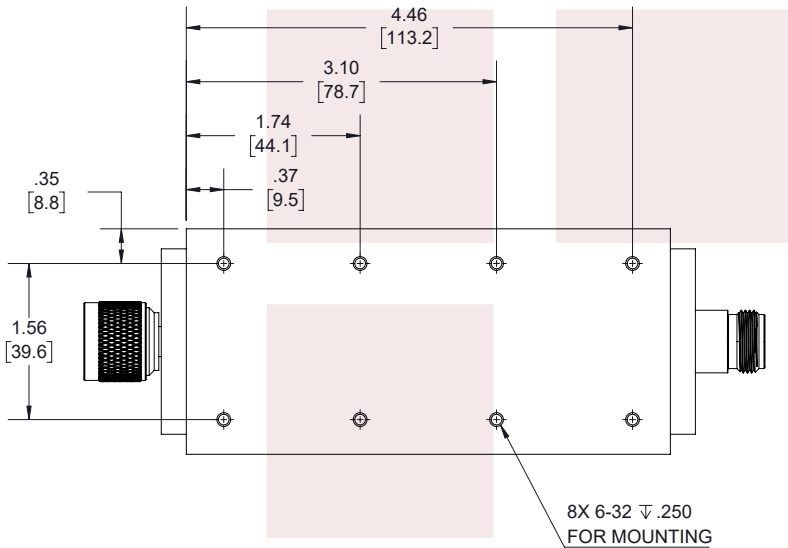
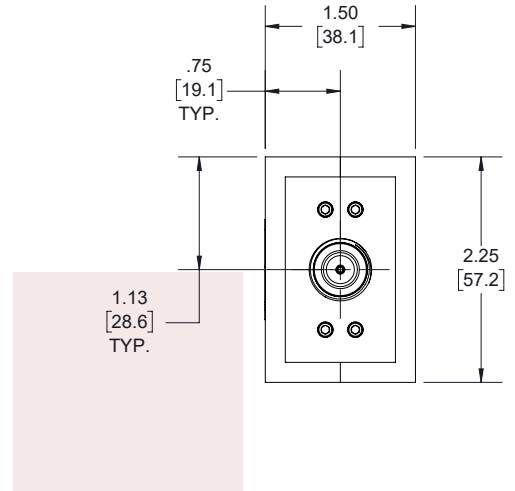
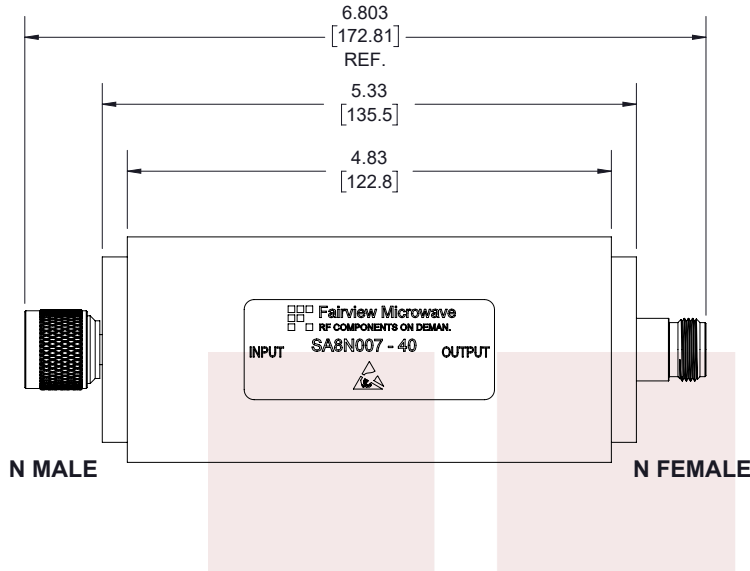
Notes:

40 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 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: [40 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 GHz Rated to 150 Watts with Black Aluminum Heatsink Body SA8N007-40](#)

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

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

		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	CAGE CODE					
40 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 GHz Rated to 150 Watts with Black Aluminum Heatsink Body		SA8N007-40	3FKR5					
		CAD FILE	10/23/18	SHEET	1 OF 1	SCALE	N/A	SIZE