Fairview Microwave
an INFINITE brand

SA8N250-20
DATA SHEET

20 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 GHz Rated to 250 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 SA8N250-20 is a 20 dB Fixed Attenuator that operates from DC to 8.5 GHz and is rated to 250 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.

Features:

- Directional
- DC to 8.5 GHz Frequency Range
- Attenuation 20±0.75 dB
- Max Power 250 Watts (CW)
- VSWR < 1.45:1

Applications:

- Instrumentation//Precision measurements//Prototyping and characterization// Production systems

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		8.5	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.75		dB
VSWR			1.45:1	
Input Power, CW rated at +25°C, derated linearly to 25W at +125°C			250	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
VSWR, Max	1.3:1	1.45:1				

Electrical Specification Notes:
Values at +25°C, sea level.

Mechanical Specifications

Size

Length	9.22 in [234.19 mm]
Width/Diameter	2.04 in [51.82 mm]
Height	3.12 in [79.25 mm]
Weight	2.7855 lbs [1.26 kg]
Body Material and Plating	Black Anodized Aluminum Heatsink

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Configuration

Design	Fixed, Directional
Package Style	Connectorized Module

Connectors

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

Environmental Specifications

Temperature

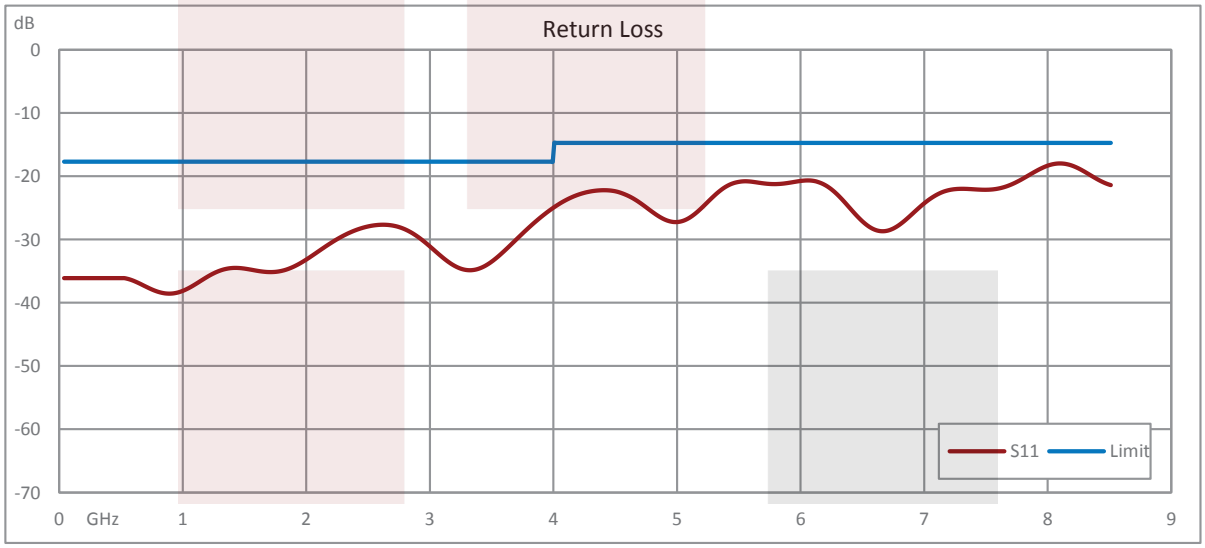
Operating Range	-55 to +125 deg C

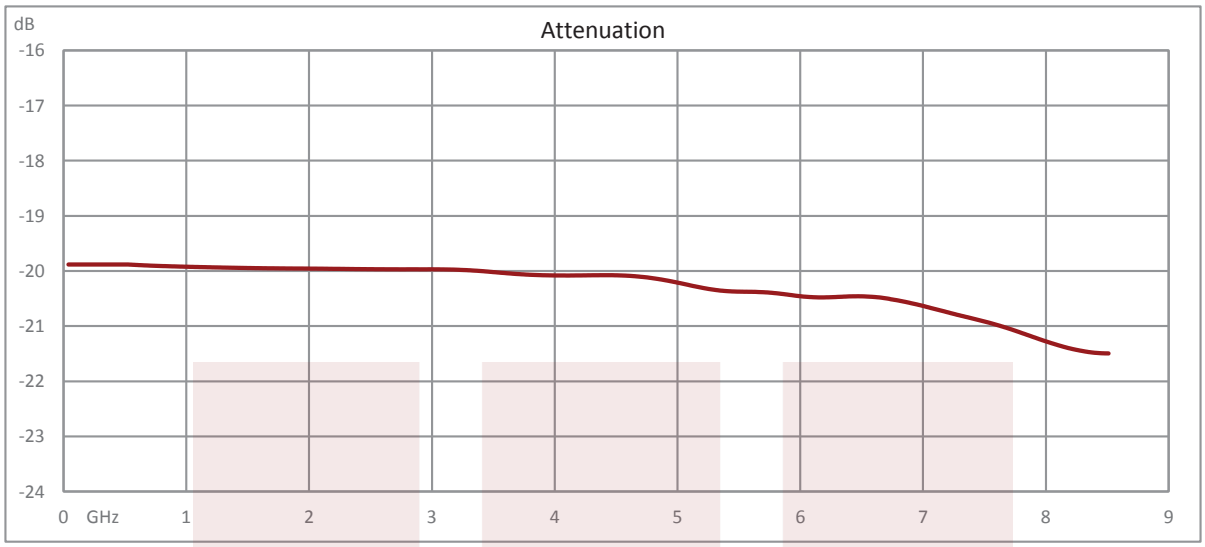
Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data



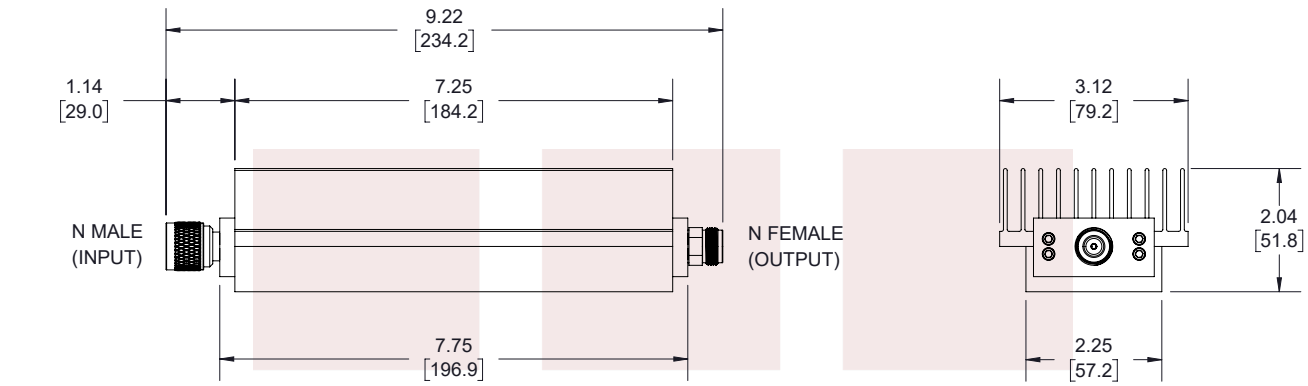


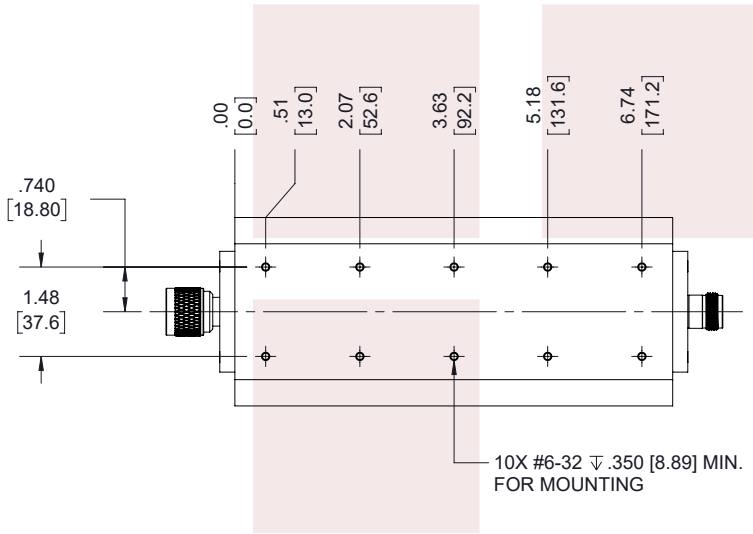
20 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 GHz Rated to 250 Watts with Black Aluminum Heatsink Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

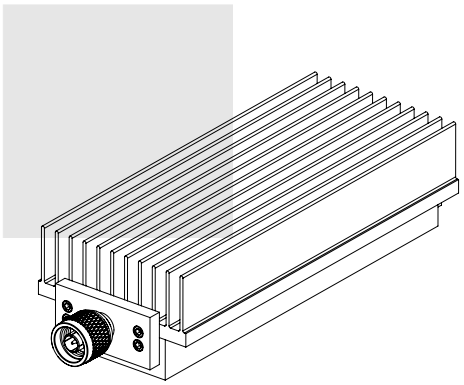
For additional information on this product, please click the following link: 20 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 GHz Rated to 250 Watts with Black Aluminum Heatsink Body SA8N250-20

URL: https://www.fairviewmicrowave.com/20db-fixed-attenuator-n-male-n-female-250-watts-sa8n250-20-p.aspx

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/30/2020	S.PONG







LABEL:

FAIRVIEW MICROWAVE
SA8N250-20
D/C: YYWW

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TITLE

20 dB Fixed Attenuator N Male to N Female Directional Up to 8.5 GHz Rated to 250 Watts with Black Aluminum Heatsink Body

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08]
.XX = ±.02 [.51]
.XXX = ±.005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	SA8N250-20	A

T-Rev.D