

20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 18 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.5 VSWR

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 SA18N-20 is a 20 dB Fixed Attenuator that operates from DC GHz to 18 GHz and is rated to 2 Watts. The versatile coaxial package uses type N male to type N female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.5		dB
VSWR			1.35:1	
RF Leakage	65	90		dBc
Input Power, CW derated linearly to 0.2W at +125°C			2	Watts
Input Power, Peak 5µs pulse, 0.05% duty cycle			500	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 12.4	12.4 to 18			GHz
VSWR, Max	1.15:1	1.25:1	1.35:1			

Mechanical Specifications

Size	
Length	1.76 in [44.7 mm]
Width/Diameter	0.82 in [20.83 mm]
Weight	0.1365 lbs [61.92 g]
Body Material and Plating	Passivated Stainless Steel

Configuration

Design	Fixed
Package Style	Connectorized Module



Features:

- DC to 18 GHz Frequency Range
- Attenuation 20±0.5 dB
- Max Power 2 Watts (CW)
- VSWR < 1.35:1

Applications:

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

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Connectors

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

Mechanical Specification Notes:
Materials and finishes comply with MIL-DTL-3933.

Environmental Specifications

Temperature

Operating Range -65 to +125 deg C

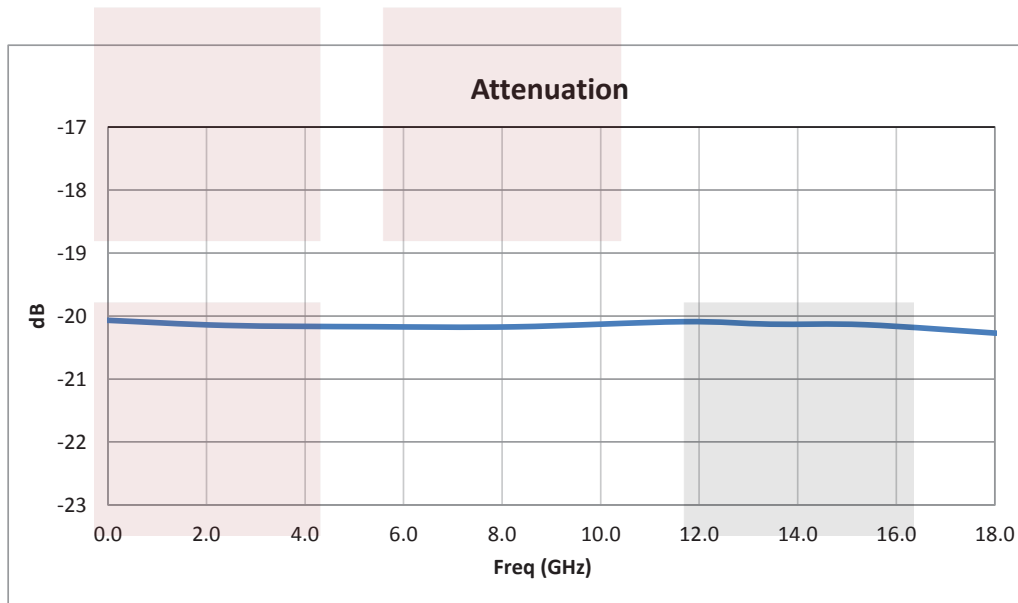
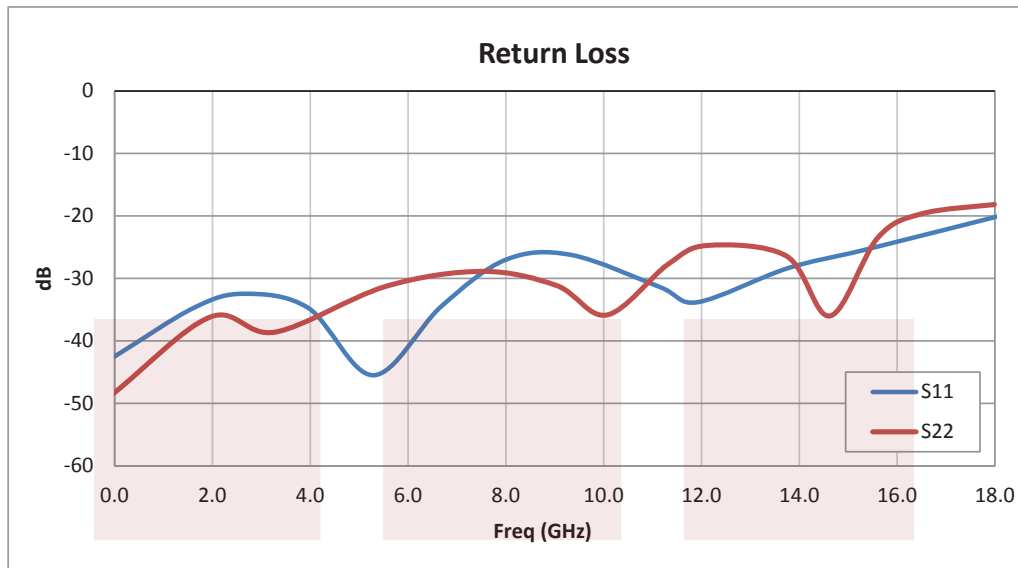
Environmental Specification Notes:
Designed to meet environmental requirements of MIL-DTL-3933.

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

Plotted and Other Data

Notes:

Typical Performance Data

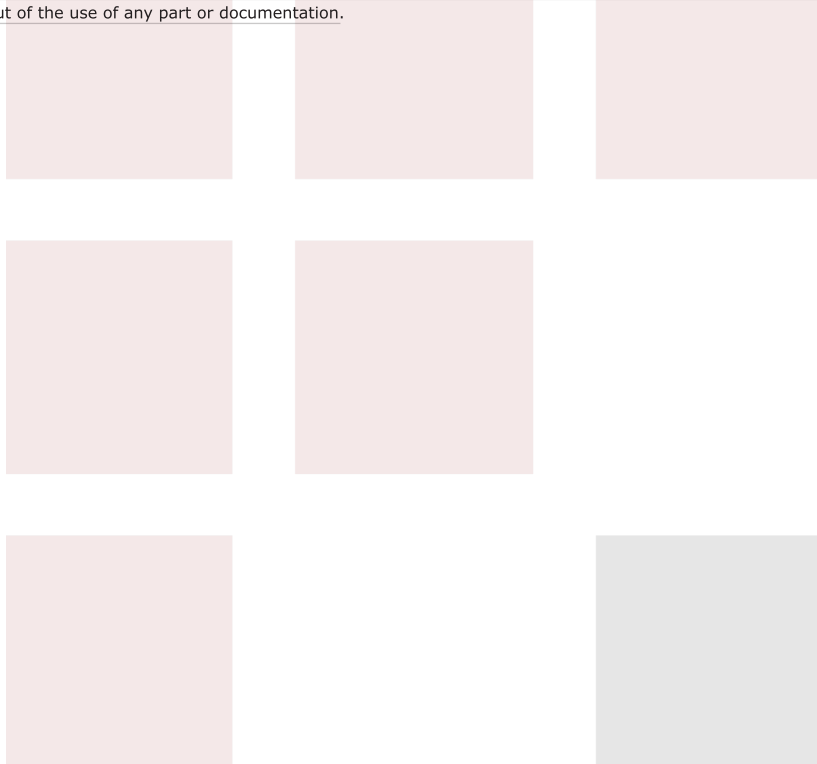


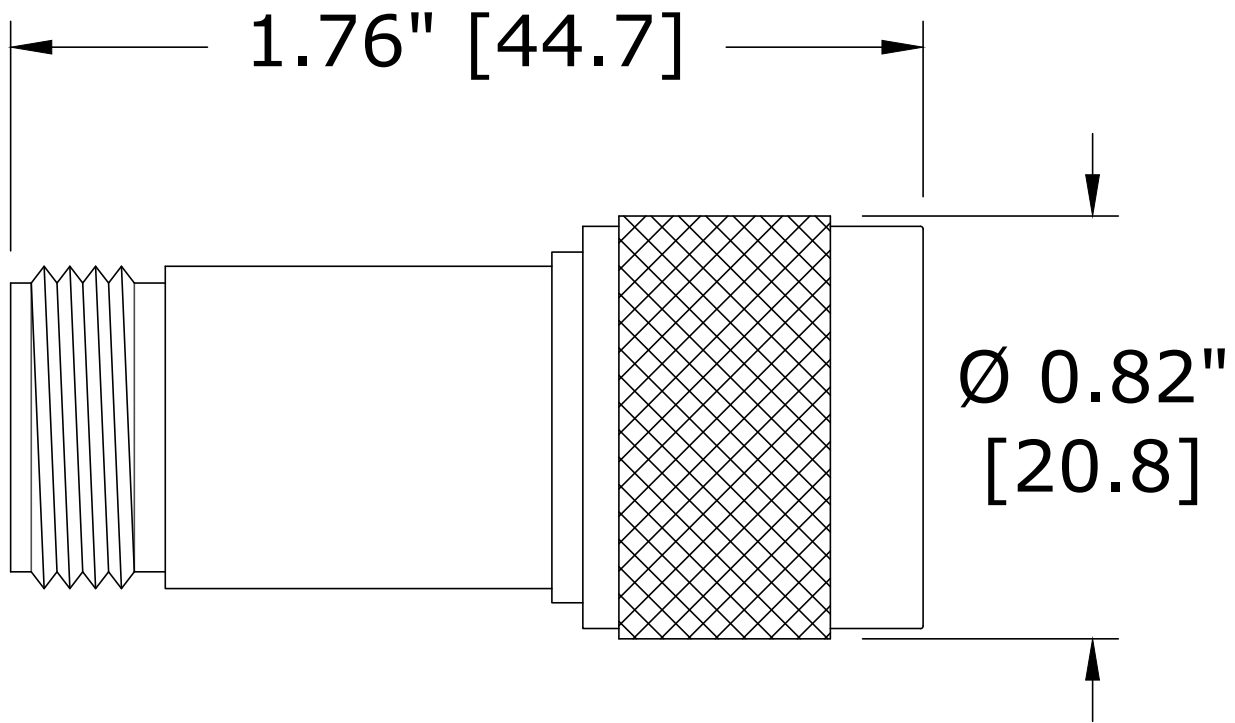
20 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 18 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.5 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Up to 18 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.5 VSWR SA18N-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-n-male-n-female-2-watts-sa18n-20-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.





N-FEMALE

N-MALE

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 SA18N-20		CAGE CODE 3FKR5	
CAD FILE	011415	SHEET	SCALE	N/A	SIZE A 5568