

# SA18N-03 DATA SHEET

# 3 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-03 is a 3 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	Тур	Max	Units	
Frequency Range	DC		18	GHz	
Impedance		50		Ohms	
Nominal Attenuation		3		dB	
Attenuation Accuracy		0.3		dB	
VSWR			1.35:1		
RF Leakage	65	90		dBc	
Input Power, CW derated linearly to 0.2W at +125°C			2	Watts	
	W 40 1125 C				
Input Power, Peak			500	Watts	

#### Specifications by Frequency

5µs pulse, 0.05% duty cycle

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

Length1.76 in [44.7 mm]Width/Diameter0.82 in [20.83 mm]Weight0.1391 lbs [63.09 g]Body Material and PlatingPassivated Stainless Steel

### Configuration

Design Fixed

Package Style Connectorized Module



#### **Features:**

- DC to 18 GHz Frequency Range
- Attenuation 3±0.3 dB
- Max Power 2 Watts (CW)
- VSWR < 1.35:1

# **Applications:**

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

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#### **Connectors**

Dielectric Type Teflon Teflon	Description	Connector 1	Connector 2
Contact Material & Plating Beryllium Copper, Gold Beryllium Copper, Co	Туре	N Male	N Female
Dielectric Type Teflon Teflon	Connector Spec.	MIL-SDT-348	MIL-SDT-348
	Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Rody Material & Plating Passivated Stainless Steel Passivated Stainless	Dielectric Type	Teflon	Teflon
body Matchai & Mading Massivated Stall liess Steel Massivated Stall liess	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**

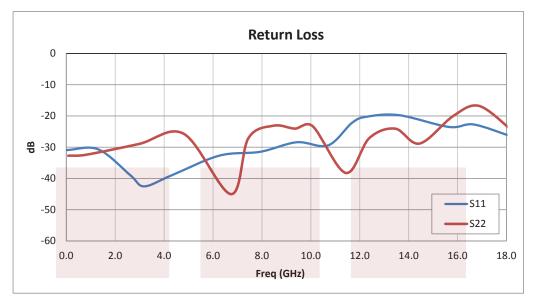
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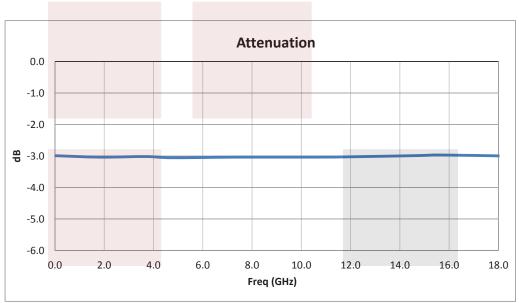
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# **Typical Performance Data**









3 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: 3 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-03

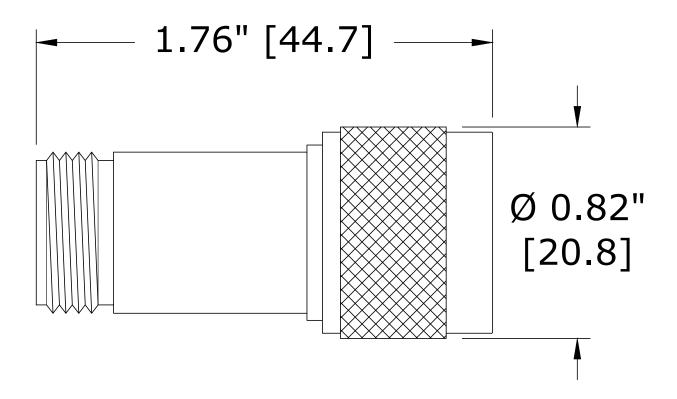
URL: https://www.fairviewmicrowave.com/3db-fixed-attenuator-n-male-n-female-2-watts-sa18n-03-p.aspx



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**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-03			CAGE CODE 3FKR5		
	CAD FILE 011415	SHEET	SCALE	N/A	SIZE A	5568