

## SA18N-15 DATA SHEET

# 15 dB Fixed Attenuator N Male To N Female Up To 18 GHz Rated To 2 Watts With Passivated Stainless Steel 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 selections and ships them same day. The SA18N-15 is a 15 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 2 Watts. The versatile coaxial package uses N male to N female connectors and is also REACH and RoHS compliant.

#### **Electrical Specifications**

Description	Min	Тур	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Nominal Attenuation		15		dB
Attenuation Accuracy		±1.5		dB
VSWR			1.5:1	
RF Leakage	65	90		dBc
Input Power, CW			2	Watts
derated linearly to 0.2	W at +125°C			
Input Power, Peak 5µs pulse, 0.05% duty	/ cycle		500	Watts

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 8	8 to 18				GHz
VSWR, Max	1.3:1	1.5:1				

### **Mechanical Specifications**

Size

Length 1.76 in [44.7 mm]
Width/Diameter 0.82 in [20.83 mm]
Weight 0.131 lbs [59.42 g]
Body Material and Plating Passivated Stainless Steel

Configuration

Design Fixed

Package Style Connectorized Module



#### Features:

- DC to 18 GHz Frequency Range
- Attenuation 15±1.5 dB
- Max Power 2 Watts (CW)
- VSWR < 1.5:1

### **Applications:**

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

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#### **Connectors**

Description	Connector 1	Connector 2		
Туре	N Male	N Female		
Connection Method	Standard	Standard		
Polarity	Standard	Standard		
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 (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes

REACH Compliant 12/17/2015

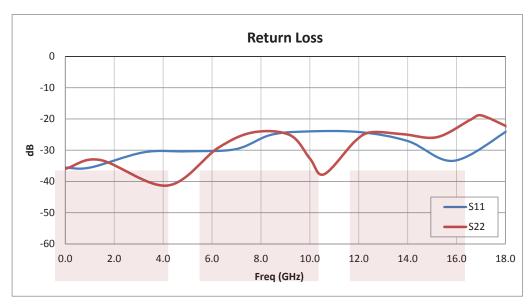
**Plotted and Other Data** 

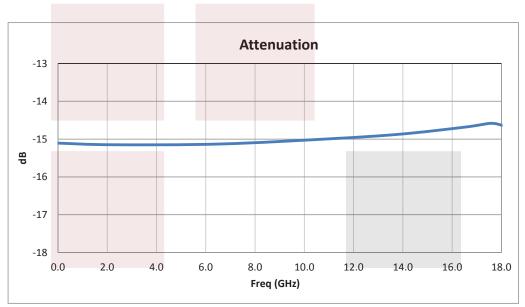
Notes:





#### **Typical Performance Data**









15 dB Fixed Attenuator N Male To N Female Up To 18 GHz Rated To 2 Watts With Passivated Stainless Steel 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.

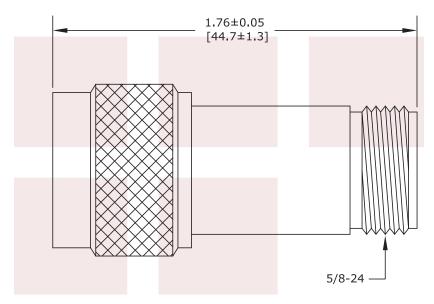
For additional information on this product, please click the following link: 15 dB Fixed Attenuator N Male To N Female Up To 18 GHz Rated To 2 Watts With Passivated Stainless Steel Body SA18N-15

URL: http://www.fairviewmicrowave.com/15db-fixed-attenuator-n-male-n-female-2-watts-sa18n-15-p.aspx









N				
M	Δ	ī	F	

P/N	ATTEN.
SA18N-00	0 dB
SA18N-01	1 dB
SA18N-02	2 dB
SA18N-03	3 dB
SA18N-04	4 dB
SA18N-05	5 dB
SA18N-06	6 dB
SA18N-07	7 dB
SA18N-08	8 dB

Ν **FEMALE** 

	TEMALL			
P/N	ATTEN.			
SA18N-09	9 dB			
SA18N-10	10 dB			
SA18N-12	12 dB			
SA18N-14	14 dB			
SA18N-15	15 dB			
SA18N-20	20 dB			
SA18N-30	30 dB			
SA18N-40	40 dB			

STANDARD TOLERANCES

 $\pm 0.03$ .XX  $\pm 0.010$ .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

TITLE 15 dB Fixed Attenuator N Male To N Female Up To 18 GHz Rated To 2 Watts With Passivated Stainless Steel Body

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		SA18N		CAGE C		FKR5
CAD FILE	031716	SHEET	SCAL	E N/A	SIZE A	3045