

3 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 18 GHz Rated to 100 Watts, Heatsink Body, 1.45 VSWR



**SA18N100-03**

**Features**

- Bidirectional
- DC to 18 GHz Frequency Range
- Attenuation 3dB Typical
- Max Power 100 Watts (CW)
- VSWR < 1.45:1

**Applications**

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

**Description**

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 SA18N100-03 is a 3 dB Fixed Attenuator that operates from DC to 18 GHz and is rated to 100 Watts. The versatile coaxial package uses type N male to type N female connectors. The Black Anodized Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Nominal Attenuation		3		dB
Attenuation Accuracy		1		dB
VSWR			1.45:1	
Input Power, CW			100	Watts
rated at +25°C, derated linearly to 10W at +125°C				
Input Power, Peak			1	kWatts
5µs pulse, 2.5% duty cycle				

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 8	8 to 12.4	12.4 to 18			GHz
VSWR, Max	1.25:1	1.35:1	1.45:1			

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

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### Mechanical Specifications

#### Size

Length	0 in [0 mm]
Width/Diameter	0 in [0 mm]
Height	0 in [0 mm]
Weight	0.9285 lbs [421.16 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

#### Configuration

Design	Fixed, Bidirectional
Package Style	Connectorized Module

### Connectors

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

### Environmental Specifications

#### Temperature

Operating Range	-55 to +125 deg C
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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

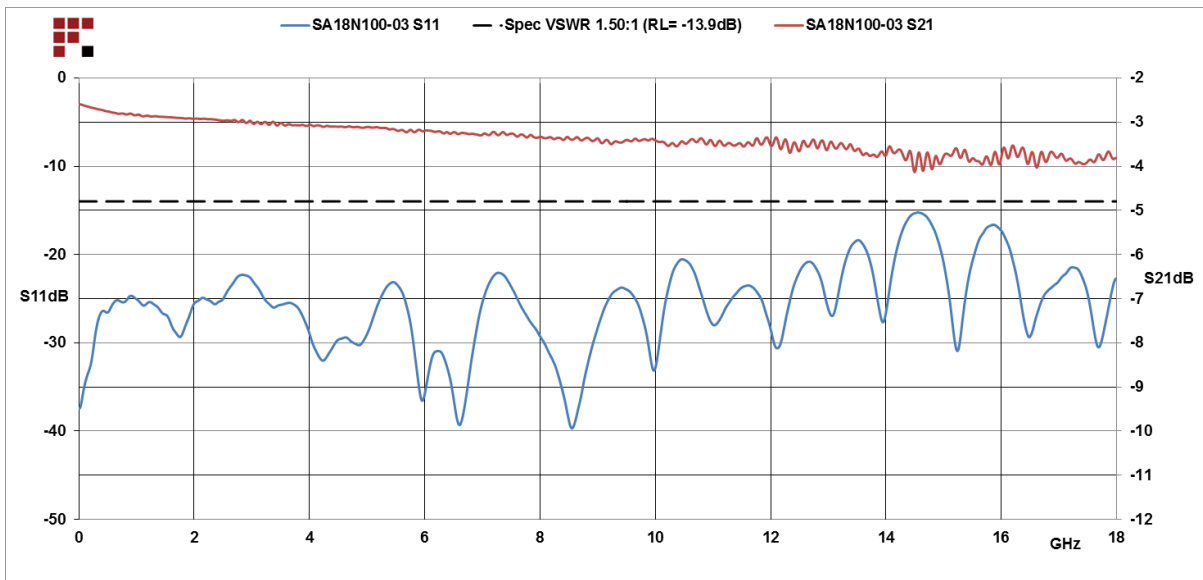
Notes:

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**SA18N100-03**

Typical Performance Data



3 dB Fixed Attenuator N Male (Plug) to N Female (Jack) Up to 18 GHz Rated to 100 Watts, Heatsink Body, 1.45 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.

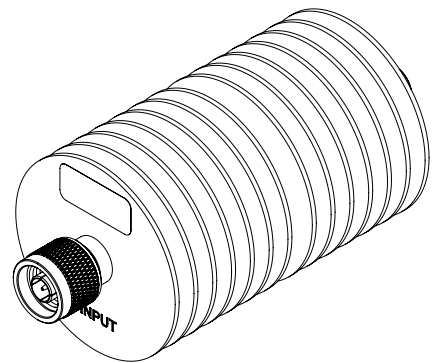
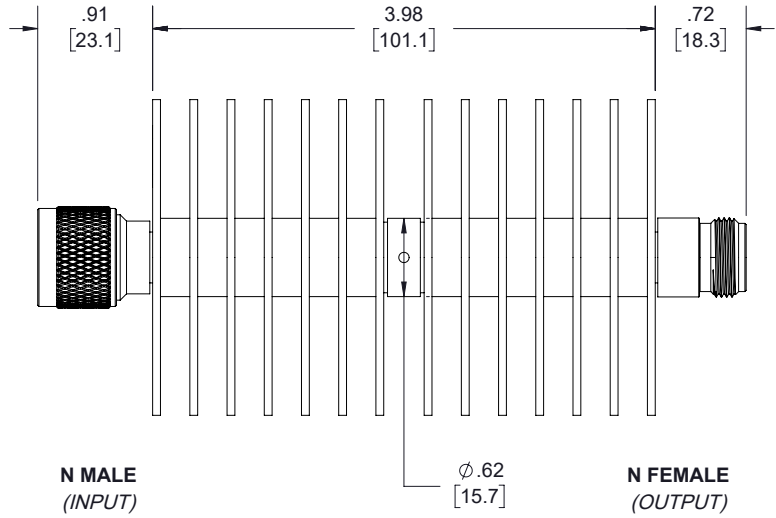
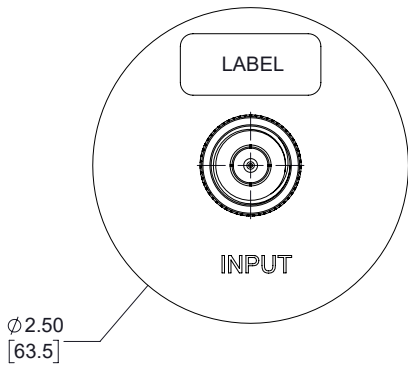
For additional information on this product, please click the following link: [3 dB Fixed Attenuator N Male \(Plug\) to N Female \(Jack\) Up to 18 GHz Rated to 100 Watts, Heatsink Body, 1.45 VSWR SA18N100-03](https://www.fairviewmicrowave.com/3db-fixed-attenuator-n-male-n-female-100-watts-sa18n100-03)

URL: <https://www.fairviewmicrowave.com/3db-fixed-attenuator-n-male-n-female-100-watts-sa18n100-03-p.aspx>

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# SA18N100-03 CAD Drawing

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**LABEL**

FAIRVIEW MICROWAVE  
 SA18N100-03  
 D/C: YYWW

**STANDARD TOLERANCES**

.X  $\pm 0.2$   
 .XX  $\pm 0.01$   
 .XXX  $\pm 0.005$

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

 <b>Fairview Microwave</b> an INFINITE brand	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 <b>SA18N100-03</b>			CAGE CODE <b>3FKR5</b>			
CAD FILE 09/26/19		SHEET 1 OF 1		SCALE N/A		SIZE A	7361