Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

# SA3N5W-10
# DATA SHEET

## 10 dB Fixed Attenuator N Male To N Female Up To 3 GHz Rated To 5 Watts With Aluminum 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 SA3N5W-10 is a 10 dB Fixed Attenuator that operates from DC to 3 GHz and is rated to 5 Watts. The versatile coaxial package uses N male to N female connectors and is also REACH and RoHS compliant.

### Features:

- Bidirectional
- DC to 3 GHz Frequency Range
- Attenuation 10±0.75 dB
- Max Power 5 Watts (CW)
- VSWR < 1.2:1

### Applications:

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

### Electrical Specifications

| Description | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 3 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 10 | | dB |
| Attenuation Accuracy | | ±0.75 | | dB |
| VSWR | | | 1.2:1 | |
| Passive Intermodulation | | | -100 | dBc |
| Input Power, CW<br>derated linearly to 0.5W @125°C | | | 5 | Watts |
| Input Power, Peak<br>5µs pulse, 0.5% duty cycle | | | 500 | Watts |

Electrical Specification Notes:
Passive intermodulation specified at 910 MHz with two input signals at 935MHz and 960MHz with average carrier power levels of +33dBm each.

### Mechanical Specifications

**Size**

| | |
|---|---|
| Length | 2.76 in [70.1 mm] |
| Width/Diameter | 0.79 in [20.07 mm] |
| Weight | 0.154 lbs [69.85 g] |
| Body Material and Plating | Aluminum |

**Configuration**

| | |
|---|---|
| Design | Fixed, Bidirectional |
| Package Style | Connectorized |

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### Connectors

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | N Male | N Female |
| Contact Material & Plating | Brass, Gold | Beryllium Copper, Gold |
| Outer Conductor Material & Plating | Brass, Nickel | Brass, Nickel |
| Body Material & Plating | Brass, Nickel | Brass, Nickel |

## Environmental Specifications

**Temperature**

Operating Range -55 to +125 deg C

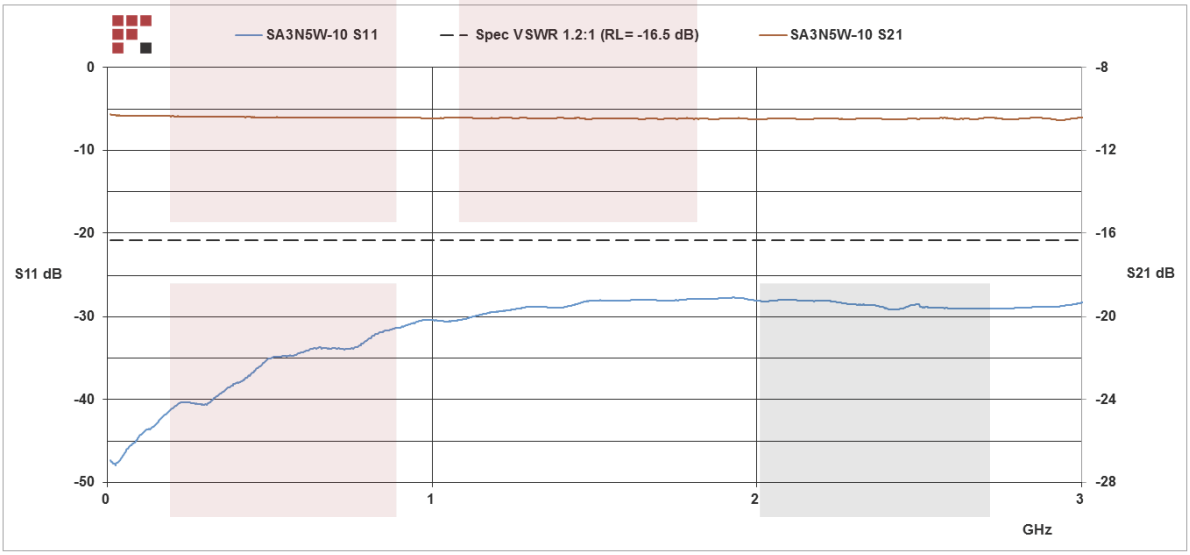
## Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
REACH Compliant 12/17/2015

## Plotted and Other Data

Notes:

**Typical Performance Data**



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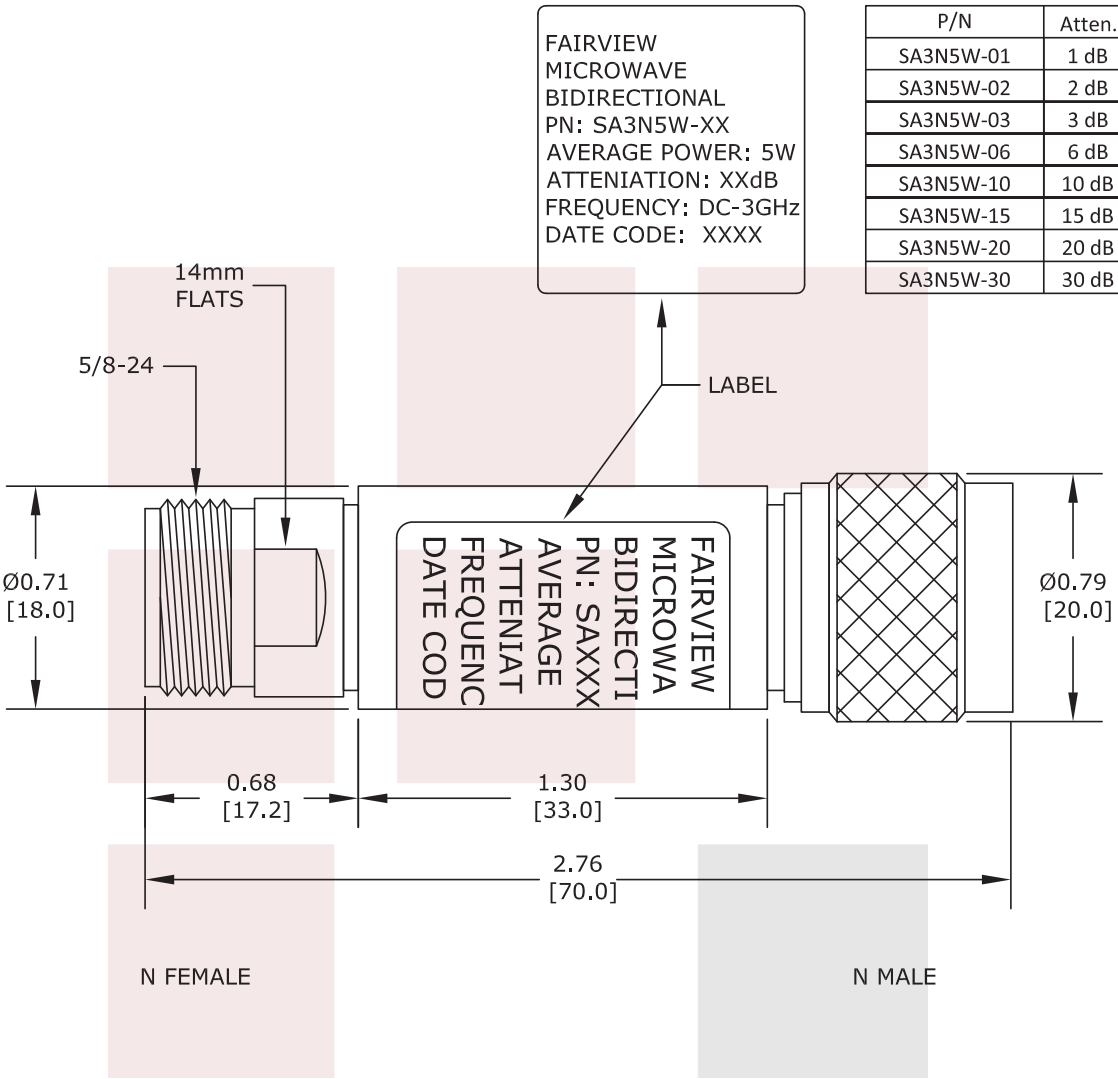
10 dB Fixed Attenuator N Male To N Female Up To 3 GHz Rated To 5 Watts With Aluminum Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 10 dB Fixed Attenuator N Male To N Female Up To 3 GHz Rated To 5 Watts With Aluminum Body SA3N5W-10

URL: http://www.fairviewmicrowave.com/10db-fixed-attenuator-n-male-n-female-5-watts-sa3n5w-10-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.

| P/N | Atten. |
|---|---|
| SA3N5W-01 | 1 dB |
| SA3N5W-02 | 2 dB |
| SA3N5W-03 | 3 dB |
| SA3N5W-06 | 6 dB |
| SA3N5W-10 | 10 dB |
| SA3N5W-15 | 15 dB |
| SA3N5W-20 | 20 dB |
| SA3N5W-30 | 30 dB |




STANDARD TOLERANCES
DIMENSIONS IN INCHES
AND TOLERANCE
±0.08%

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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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
10 dB Fixed Attenuator N Male To N Female Up To 3 GHz Rated To 5 Watts With Aluminum Body

DWG NO SA3N5W
CAGE CODE 3FKR5

CAD FILE 032216 | SHEET | SCALE N/A | SIZE A | 3045



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