

10 dB Fixed Attenuator BNC Male (Plug) to BNC Female (Jack) Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.3 VSWR



### **SA6B10W-10**

#### **Features**

- · Bidirectional
- DC to 6 GHz Frequency Range
- · Attenuation 10±1 dB

### **Applications**

- · Instrumentation
- · Precision measurements

- Max Power 10 Watts (CW)
- VSWR < 1.3:1</li>
- 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 SA6B10W-10 is a 10 dB Fixed Attenuator that operates from DC to 6 GHz and is rated to 10 Watts. The versatile coaxial package uses BNC male to BNC 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		6	GHz
Impedance		50		Ohms
Nominal Attenuation		10		dB
Attenuation Accuracy		1		dB
VSWR			1.3:1	
Input Power, CW			10	Watts
derated linearly to 1W at +125°C				
Input Power, Peak			1	kWatts
5µs pulse, 0.5% duty cycle				

**Electrical Specification Notes:** 

Power Sensitivity: 0.005 dB/dB/W max.//Temperature coefficient: 0.0004 dB/dB/°C max.

### **Mechanical Specifications**

Size

Length Width/Diameter Height Weight

Body Material and Plating

2.64 in [67.06 mm] 0.63 in [16 mm] 0 in [0 mm] 0.265 lbs [120.2 q]

Black Anodized Aluminum Heatsink



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# **SA6B10W-10**

Configuration

Design Package Style

Fixed, Bidirectional Connectorized Module

#### **Connectors**

Description	Connector 1	Connector 2
Туре	BNC Male	BNC Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel	Brass, Nickel

Mechanical Specification Notes:

Connectors mate nondestructively with MIL-PRF-39012 connectors.

# **Environmental Specifications**

**Temperature** 

Operating Range

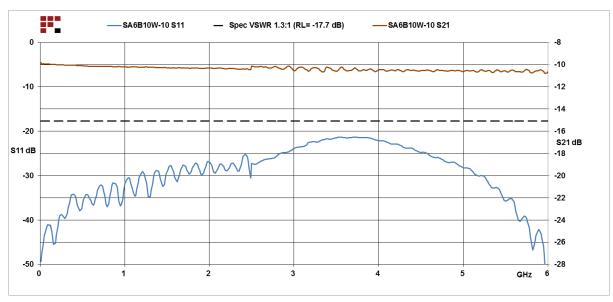
-55 to +125 deg C

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

# **Typical Performance Data**







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10 dB Fixed Attenuator BNC Male (Plug) to BNC Female (Jack) Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.3 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.

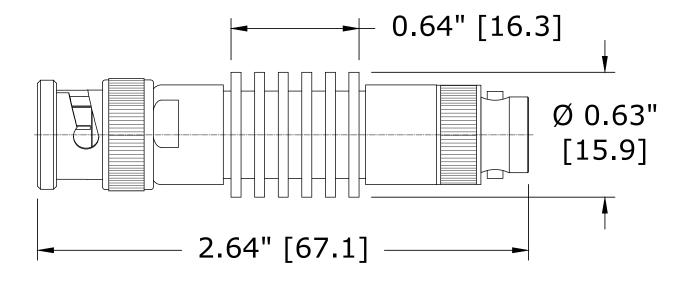
For additional information on this product, please click the following link: 10 dB Fixed Attenuator BNC Male (Plug) to BNC Female (Jack) Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.3 VSWR SA6B10W-10

URL: https://www.fairviewmicrowave.com/10db-fixed-attenuator-bnc-male-bnc-female-10-watts-sa6b10w-10-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

# SA6B10W-10 CAD Drawing

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**BNC MALE** 

**BNC FEMALE** 

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 SA6B10W-10			CAGE CODE 3FKR5			
	CAD FILE 011415	SHEET	SCAL	E N/A	SIZE A	5568	