

3 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack)  
Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.2 VSWR



**SA6S10W-03**

**Features**

- DC to 6 GHz Frequency Range
- Attenuation 3dB Typical
- Max Power 10 Watts (CW)
- VSWR < 1.2:1

**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 SA6S10W-03 is a 3 dB Fixed Attenuator that operates from DC to 6 GHz and is rated to 10 Watts. The versatile coaxial package uses SMA male to SMA 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		3		dB
Attenuation Accuracy		0.5		dB
VSWR			1.2:1	
Input Power, CW			10	Watts

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 6				GHz
VSWR, Max	1.15:1	1.2:1				

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

**Mechanical Specifications**

**Size**

- Length 1.86 in [47.24 mm]
- Width/Diameter 0.62 in [15.75 mm]
- Weight 0.0526 lbs [23.86 g]
- Body Material and Plating Black Anodized Aluminum Heatsink

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**Configuration**

Design	Fixed
Package Style	Connectorized Module

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Torque	7 in-lbs 0.79 Nm	
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:

**Typical Performance Data**

3 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.2 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.

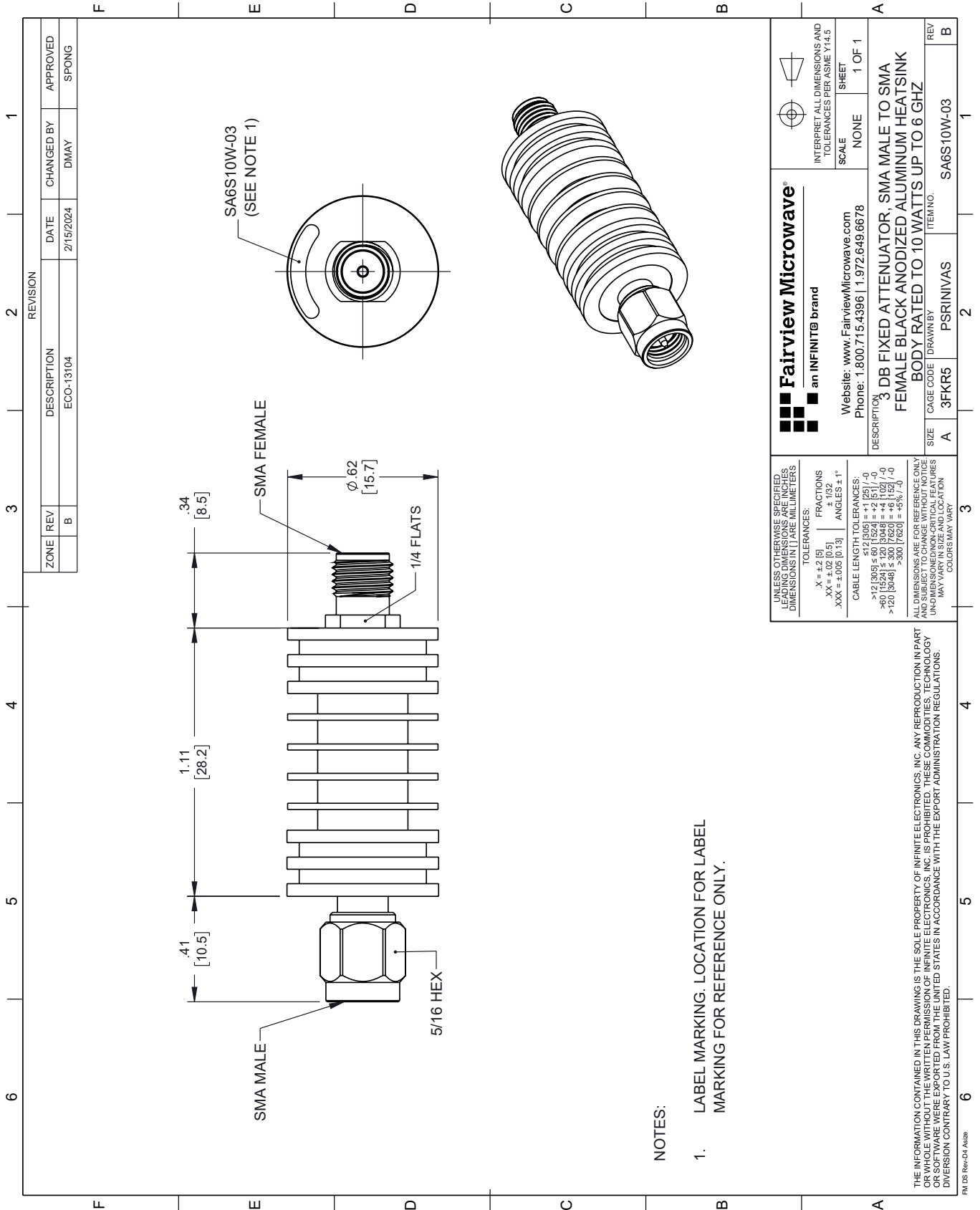
For additional information on this product, please click the following link: [3 dB Fixed Attenuator SMA Male \(Plug\) to SMA Female \(Jack\) Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.2 VSWR SA6S10W-03](#)

URL: <https://www.fairviewmicrowave.com/3db-fixed-attenuator-sma-male-sma-female-10-watts-sa6s10w-03-p.aspx>

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# SA6S10W-03 CAD Drawing

3 dB Fixed Attenuator SMA Male (Plug) to SMA Female (Jack) Up to 6 GHz Rated to 10 Watts, Heatsink Body, 1.2 VSWR



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	ECO-13104	DIMAY	SPONG
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 <b>Fairview Microwave</b> an INFINITB brand		Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION <b>3 DB FIXED ATTENUATOR, SMA MALE TO SMA FEMALE BLACK ANODIZED ALUMINUM HEATSINK BODY RATED TO 10 WATTS UP TO 6 GHZ</b>		CAGE CODE: 3FKR5 DRAWN BY: PSRINIVAS	ITEM NO.: SA6S10W-03
ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.		TOLERANCES: .X = ±.2 [5]      FRACTIONS ± 1/32 .XX = ±.02 [0.5]      ANGLES ± 1° .XXX = ±.005 [0.13]	CABLE LENGTH TOLERANCES: <12 [305] ≤ 60 [1524] = ±1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±5% / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

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