

# SA6-12 DATA SHEET

# **12 dB Fixed Attenuator SMA Male To SMA Female Up To 6 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 SA6-12 is a 12 dB Fixed Attenuator that operates from DC to 6 GHz and is rated to 2 Watts. The versatile coaxial package uses SMA male to SMA female connectors and is also REACH and RoHS compliant.

## **Electrical Specifications**

Description	Min	Тур	Мах	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Nominal Attenuation		12		dB
Attenuation Accuracy		±0.75		dB
VSWR			1.3:1	
Input Power, CW			2	Watts
Input Power, Peak			200	Watts

# in the large wave

## Features:

- DC to 6 GHz Frequency Range
- Attenuation 12±0.75 dB
- Max Power 2 Watts (CW)
- VSWR < 1.3:1

# **Applications:**

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

## **Mechanical Specifications**

Size Length Width/Diameter Weight Body Material and Plating

#### Configuration

Design Package Style 0.86 in [21.84 mm] 0.312 in [7.92 mm] 0.012 lbs [5.44 g]

Passivated Stainless Steel

Fixed Connectorized Module

#### Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





#### Connectors

Description	Connector 1	Connector 2			
Туре	SMA Male	SMA Female			
Connection Method	Standard	Standard			
Polarity	Standard	Standard			
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold			
Hex Size	5/16 inch				
Torque	7 in-lbs [0.79 Nm]				
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel			

## **Environmental Specifications**

Temperature Operating Range

-65 to +125 deg C

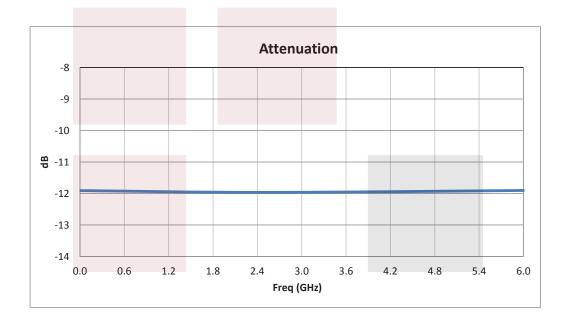
# **Compliance Certifications** (visit www.FairviewMicrowave.com for current document)

Compliance Certificati	<b>ons</b> (visit www.Fairvie	ewMicrowave.com for	current document)
RoHS Compliant	Yes		
REACH Compliant	12/17	/2015	
Plotted and Other Dat Notes:	a		





#### **Return Loss** 0 -10 -20 **පු** -30 -40 -S11 -50 S22 -60 3.0 0.0 0.6 1.2 1.8 2.4 3.6 4.2 4.8 5.4 6.0 Freq (GHz)



#### **Typical Performance Data**

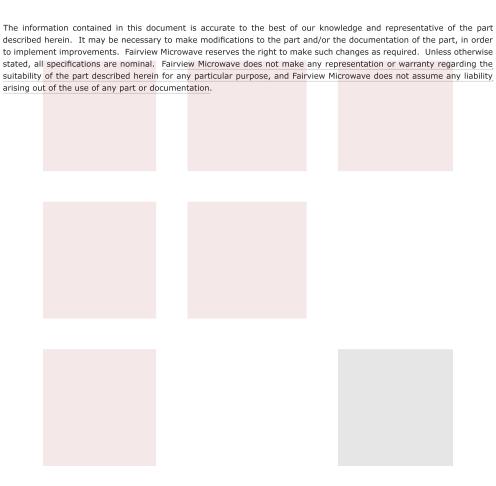




12 dB Fixed Attenuator SMA Male To SMA Female Up To 6 GHz Rated To 2 Watts With Passivated Stainless Steel Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

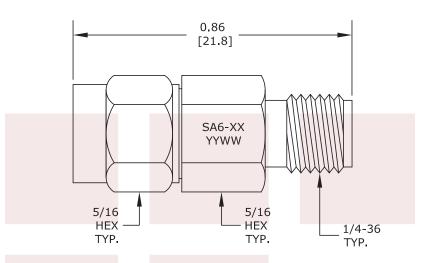
For additional information on this product, please click the following link: 12 dB Fixed Attenuator SMA Male To SMA Female Up To 6 GHz Rated To 2 Watts With Passivated Stainless Steel Body SA6-12

URL: http://www.fairviewmicrowave.com/12db-fixed-attenuator-sma-male-sma-female-2-watts-sa6-12-p.aspx





# SA6-12 DATA SHEET



P/N	ATTEN.
SA6-00	0 dB
SA6-01	1 dB
SA6-02	2 dB
SA6-03	3 dB
SA6-04	4 dB
SA6-05	5 dB
SA6-06	6 dB
SA6-05	5 dB

	P/N	ATTEN.
	SA6-07	7 dB
	SA6-08	8 dB
e,	SA6-09	9 dB
5	SA6-10	10 dB
	SA6-12	12 dB
	SA6-15	15 dB
9	SA6-20	20 dB
	SA6-30	30 dB
9	SA6-15 SA6-20	15 dB 20 dB

<u>STANDA</u>	RD TOLERANCES
.x	±0.03
.xx	$\pm 0.010$
.XXX	±0.005
*STANDARD	TOI FRANCES APPI

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC.	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].				
12 dB Fixed Attenuator SMA Male To SMA Female Up To 6 GHz Rated To 2 Watts With Passivated Stainless Steel Body	DWG NO SA6			CAGE CODE 3FKR5	
	CAD FILE 031616	SHEET	SCALE	N/A	SIZE A