Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

SA10P2W-06
DATA SHEET

6 dB Fixed Attenuator SMP Male To SMP Female Up To 10 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 SA10P2W-06 is a 6 dB Fixed Attenuator that operates from DC to 10 GHz and is rated to 2 Watts. The versatile coaxial package uses SMP male to SMP female connectors and is also REACH and RoHS compliant.

Features:

- DC to 10 GHz Frequency Range
- Attenuation 6±0.5 dB
- Max Power 2 Watts (CW)
- VSWR < 1.35:1

Applications:

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

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		10	GHz
Impedance		50		Ohms
Nominal Attenuation		6		dB
VSWR			1.35:1	
Input Power, CW			2	Watts
Input Power, Peak for 25 µsec.			100	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 2	2 to 5	5 to 10			GHz
VSWR, Max	1.15:1	1.25:1	1.35:1			
Atten Accuracy, Typ	±0.2	±0.3	±0.5			dB

Electrical Specification Notes:
Impedance deviation of ±0.25 Ohms
VSWR deviation of ±0.1 %
Power coefficient of 0.001 dB/W (change in attenuation with increase in power)
Temperature coefficient of 0.001 dB/°C max., 0.0003 dB/°C typ.

Mechanical Specifications

Size

Length	0.81 in [20.57 mm]
Width/Diameter	0.28 in [7.11 mm]
Weight	0.006 lbs [2.72 g]
Body Material and Plating	Passivated Stainless Steel

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Configuration

Design	Fixed
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	SMP Male	SMP Female
Connection Method	Push-On	Standard
Polarity	Standard	Standard
Contact Material & Plating	Phosphor Bronze, Gold	Beryllium Copper, Gold
Contact Plating Spec.	4 µ-in min.	4 µ-in min.
Dielectric Type	Teflon	Teflon
Body Material & Plating	Passivated Stainless Steel	Beryllium Copper, Gold
Body Plating Spec.		4 µ-in min.

Environmental Specifications

Temperature

Operating Range	-50 to +80 deg C

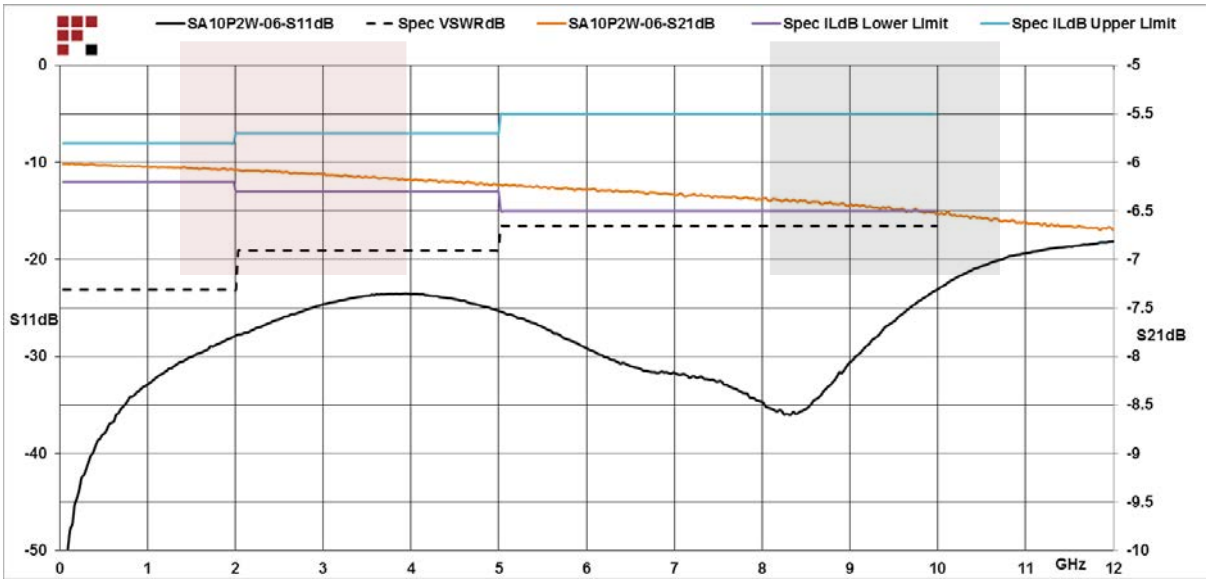
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

Plotted and Other Data

Notes:

Typical Performance Data



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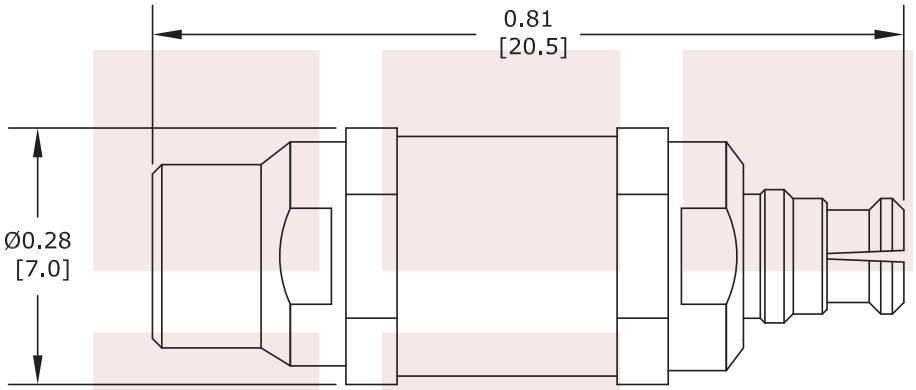
6 dB Fixed Attenuator SMP Male To SMP Female Up To 10 GHz Rated To 2 Watts With Passivated Stainless Steel Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 6 dB Fixed Attenuator SMP Male To SMP Female Up To 10 GHz Rated To 2 Watts With Passivated Stainless Steel Body SA10P2W-06

URL: http://www.fairviewmicrowave.com/6db-fixed-attenuator-smp-male-smp-female-2-watts-sa10p2w-06-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.
SA10P2W-01	1 dB
SA10P2W-02	2 dB
SA10P2W-03	3 dB
SA10P2W-04	4 dB
SA10P2W-05	5 dB
SA10P2W-06	6 dB
SA10P2W-10	10 dB
SA10P2W-15	15 dB
SA10P2W-20	20 dB
SA10P2W-30	30 dB

GENERAL TOLERANCES	
0.000-0.197	±0.0020
0.197-0.394	±0.0027
0.394-0.787	±0.0039
0.787-1.181	±0.0059
>1.181	±0.078

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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 6 dB Fixed Attenuator SMP Male To SMP Female Up To 10 GHz Rated To 2 Watts With Passivated Stainless Steel Body	DWG NO SA10P2W		CAGE CODE 3FKR5		
	CAD FILE 032216	SHEET	SCALE N/A	SIZE A	3045

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