

20 dB Fixed Attenuator SMA Reverse Polarity Male To SMA Reverse Polarity Female Up To 3 GHz Rated To 2 Watts With Brass Gold 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 varieties and ships them same day. The SA3SR-20 is a 20 dB Fixed Attenuator that operates from DC to 3 GHz and is rated to 2 Watts. The versatile coaxial package uses reverse polarity SMA male to reverse polarity SMA female connectors and is also REACH and RoHS compliant.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
VSWR			1.25:1	
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 3				GHz
VSWR, Max	1.15:1	1.25:1				
Atten Accuracy, Typ	±0.2	±0.3				dB

Electrical Specification Notes:

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	0.97 in [24.64 mm]
Width/Diameter	0.315 in [8 mm]
Weight	0.011 lbs [4.99 g]
Body Material and Plating	Brass, Gold

Configuration

Design	Fixed
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Features:

- DC to 3 GHz Frequency Range
- Attenuation 20±0.3 dB
- Max Power 2 Watts (CW)
- VSWR < 1.25:1

Applications:

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

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Package Style Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Polarity	Reverse Polarity	Reverse Polarity
Contact Material & Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Contact Plating Spec.	4 μ-in min.	4 μ-in min.
Dielectric Type	Teflon	Teflon
Hex Size	5/16 inch	
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	4 μ-in min.	4 μ-in min.

Environmental Specifications

Temperature

Operating Range -50 to +80 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

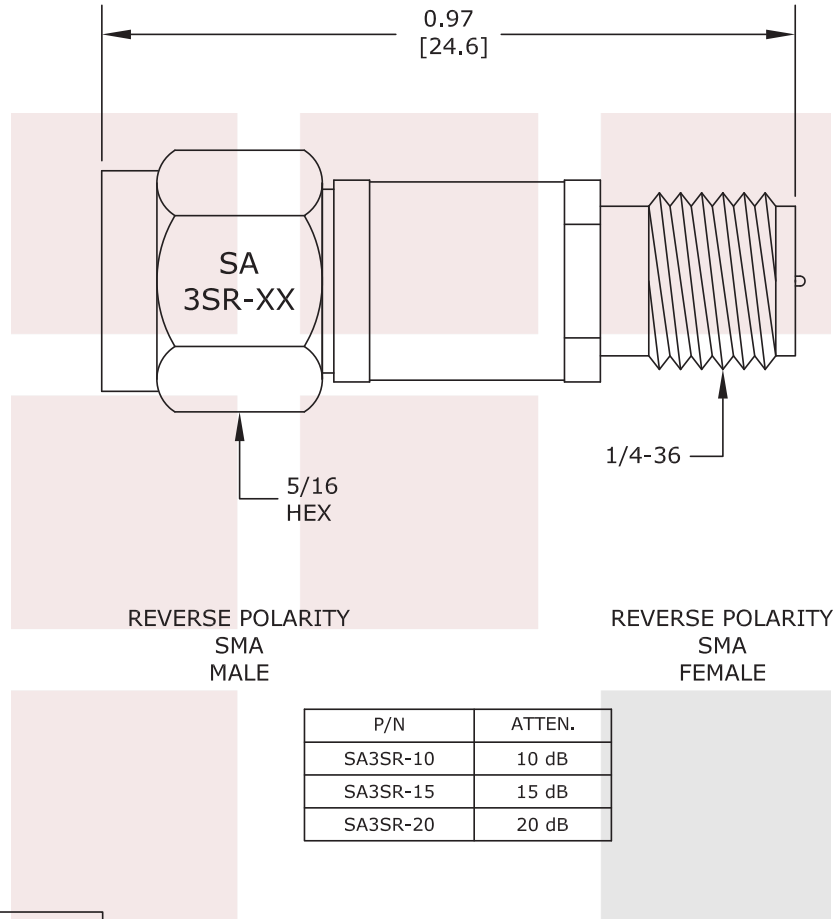
Notes:

20 dB Fixed Attenuator SMA Reverse Polarity Male To SMA Reverse Polarity Female Up To 3 GHz Rated To 2 Watts With Brass Gold 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: [20 dB Fixed Attenuator SMA Reverse Polarity Male To SMA Reverse Polarity Female Up To 3 GHz Rated To 2 Watts With Brass Gold Body SA3SR-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-sma-male-sma-female-2-watts-sa3sr-20-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.



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 20 dB Fixed Attenuator SMA Reverse Polarity Male To SMA Reverse Polarity Female Up To 3 GHz Rated To 2 Watts With Brass Gold Body		DWG NO SA3SR		CAGE CODE 3FKR5	
CAD FILE	032216	SHEET	SCALE	N/A	SIZE A 3045