Coaxial

Precision Fixed Attenuator BW-SXXW2+Series

50Ω 2W DC to 18000 MHz

The Big Deal

- Wideband, DC to 18 GHz
- Outstanding attenuation flatness
- Excellent VSWR, 1.11 typ up to 18 GHz

CASE STYLE: FF658

Product Overview

The BW-SXXW2+ series of precision fixed attenuators achieves wide frequency range with excellent flatness of attenuation. Available in a variety of attention values for different requirements, these units support a broad range of system and testing applications. Precise performance, excellent VSWR (1.11:1 typ.) and passivated stainless steel construction make these models ideal solutions for systems requiring precise attenuation across very wide frequency range.

Key Features

Feature	Advantages
Wideband, DC to 18 GHz	Ideal for an exceptionally wide variety of applications.
Excellent VSWR, 1.11 typ. up to 18 GHz	Efficient power utilization with low power reflected back to source.
Outstanding attenuation flatness	Provides precise, consistent attenuation across the entire frequency band, ideal for broadband and multi-band usage.
Passivated stainless steel connectors	Rugged construction withstands harsh environmental conditions for high reliability and long life of use.

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Precision Fixed Attenuator

BW-S0.5W2+

50Ω 2W 0.5dB DC to 18000 MHz

Generic photo used for illustration purposes only

CASE STYLE: FF658

Connectors	Model
SMA Female-SMA Male	BW-S0.5W2+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Input Power[1]	2W max

Permanent damage may occur if any of these limits are exceeded.
1. Derates linearly to 10% at 125°C

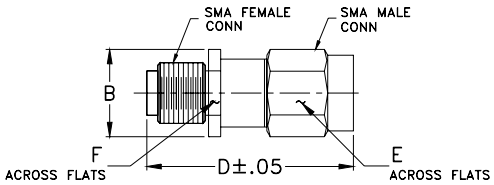
Features

- DC to 18 GHz
- precise attenuation
- excellent VSWR, 1.11:1 typ. up to 18 GHz
- passivated stainless steel connectors

Applications

- test instrument
- lab use

Outline Drawing



Outline Dimensions (inch / mm)

B	D	E	F	wt
.36	.85	.312	.312	grams
9.14	21.59	7.92	7.92	4.3

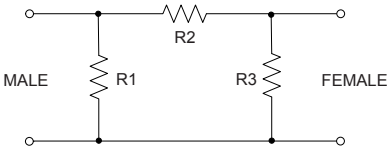
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	18	MHz
Attenuation	10-6000	0.2	0.4	0.8	dB
	6000-12400	0.2	0.5	0.8	
	12400-18000	0.2	0.6	0.8	
Input VSWR	10-6000	—	1.01	1.15	:1
	6000-12400	—	1.09	1.25	
	12400-18000	—	1.11	1.35	
Output VSWR	10-6000	—	1.02	1.15	:1
	6000-12400	—	1.07	1.25	
	12400-18000	—	1.12	1.35	

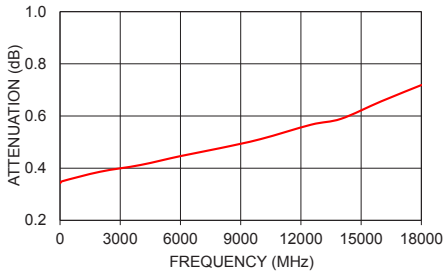
Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)	
		SMA-M	SMA-F
10	0.34	1.02	1.02
100	0.35	1.02	1.02
2000	0.39	1.04	1.01
4000	0.41	1.04	1.00
6000	0.45	1.02	1.04
8000	0.48	1.02	1.07
10000	0.51	1.02	1.09
12500	0.57	1.03	1.11
14000	0.59	1.05	1.02
16000	0.66	1.15	1.08
18000	0.72	1.19	1.10

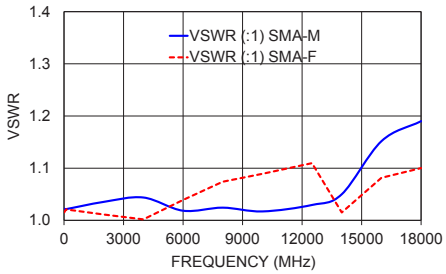
Electrical Schematic



BW-S0.5W2+
ATTENUATION



BW-S0.5W2+
VSWR



Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

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