

# Precision Fixed Attenuator

## BW-S20W2+

50Ω 2W 20dB DC to 18000 MHz

### Maximum Ratings

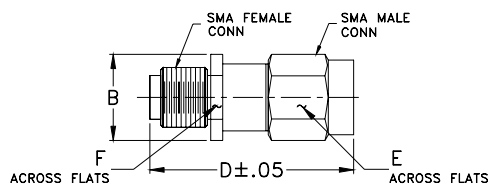
Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C\*\*

\*\*With mated connectors. Unmated, 85°C max.

Permanent damage may occur if any of these limits are exceeded.

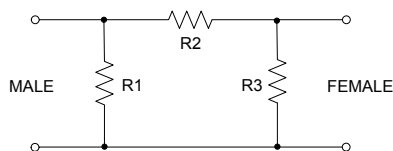
### Outline Drawing



### Outline Dimensions (inch/mm)

B	D	E	F	wt
.36	.99	.312	.312	grams
9.14	25.15	7.92	7.92	5.1

### Electrical Schematic



### Features

- DC to 18000 MHz
- precise attenuation
- excellent VSWR, 1.20 typ.
- stainless steel SMA male and female connectors

### Applications

- matching
- instrumentation
- test set-ups



CASE STYLE: FF659

Connectors	Model	Price	Qty.
SMA Female-SMA Male	BW-S20W2+	29.95 ea.	(1-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

FREQ. RANGE (MHz)	ATTENUATION <sup>1</sup> (dB)		VSWR <sup>2</sup> (:1)			MAX. INPUT POWER <sup>3</sup> (W)
	Nom.	ACCURACY	DC-4 GHz Max.	4-8 GHz Max.	8-12.4 GHz Max.	
$f_L - f_U$						
DC-18000	20	-0.5, +0.8	1.20	1.25	1.30	2

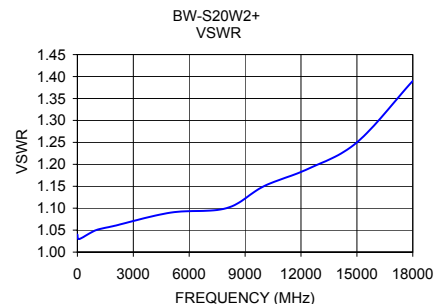
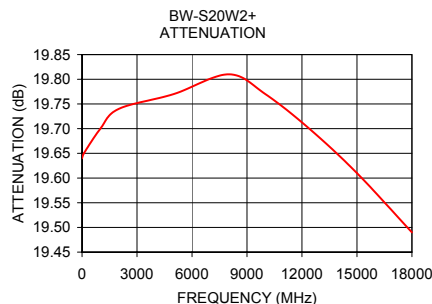
1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/°C typ.

2. VSWR from 12.4 to 18 GHz, 1.6:1 typ.

3. Average power at 25°C ambient, derate linearly to 0.5W at 100°C. Peak Power 125W max. 5μsec pulse width, 100 Hz PRF

### Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
1.00	19.64	1.04
100.00	19.65	1.03
1000.00	19.70	1.05
1999.90	19.74	1.06
5000.00	19.77	1.09
7999.90	19.81	1.10
9999.90	19.77	1.15
12400.10	19.70	1.19
15000.00	19.61	1.25
18000.00	19.49	1.39



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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

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Page 1 of 1