

Coaxial

# Precision Fixed Attenuator

## BW-S50W2+

50Ω 2W 50dB DC to 18000 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF1048

Connectors Model  
**SMA Female-SMA Male** BW-S50W2+

**+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**

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

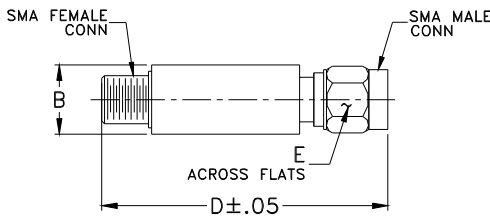
### Features

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

### Applications

- matching
- instrumentation
- test set-ups

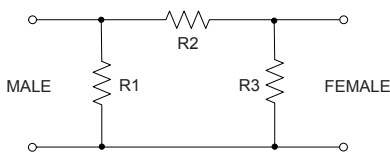
### Outline Drawing



### Outline Dimensions (inch/mm)

B	D	E	wt
0.36	1.49	0.312	grams
9.14	37.85	7.92	11.0

### Electrical Schematic



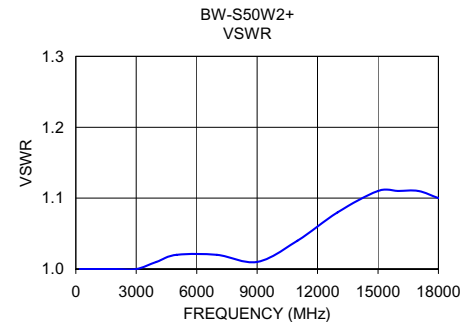
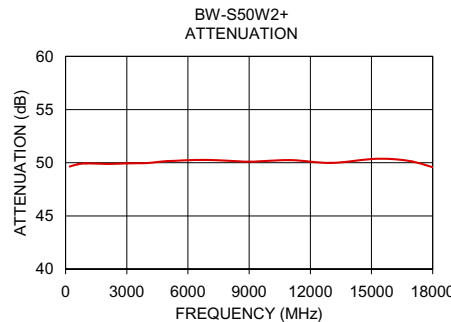
### Electrical Specifications

FREQ. RANGE (MHz)	ATTENUATION <sup>1</sup> (dB)		VSWR (:1)			MAX. INPUT POWER <sup>2</sup> (W)
	Nom.	ACCURACY	DC-4 GHz Max.	4-8 GHz Max.	8-12.4 GHz Max.	
$f_L$ - $f_U$						
DC-18000	50	±1.5	1.15	1.20	1.25	2

1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/dB/°C typ.
2. Average power at 25°C ambient, derate linearly to 0.875W at 100°C. Peak Power 250W max. 5µsec pulse width, 100 Hz PRF

### Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
200.00	49.64	1.00
600.00	49.85	1.00
1000.00	49.93	1.00
2000.00	49.88	1.00
3000.00	49.94	1.00
4000.00	49.96	1.01
5000.00	50.14	1.02
7000.00	50.26	1.02
9000.00	50.10	1.01
11000.00	50.25	1.04
13000.00	49.98	1.08
15000.00	50.34	1.11
16000.00	50.35	1.11
17000.00	50.12	1.11
18000.00	49.57	1.10



### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

