



Mini-Circuits®

COAXIAL

Precision Fixed Attenuator **BW-S20W5+**

50Ω 5 W 20 dB DC to 18 GHz SMA-Female to SMA-Male

FEATURES

- DC to 18 GHz
- Precision Attenuation
- Excellent VSWR, 1.20 Typ.
- Stainless Steel SMA Male and Female Connectors

APPLICATIONS

- Impedance Matching
- Instrumentation
- Test Setups



Generic photo used for illustration purposes only

Model No.	BW-S20W5+
Case Style	DC737
Connectors	SMA-Female to SMA-Male

+RoHS Compliant

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

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC		18	GHz
Attenuation, Nominal			20		dB
Attenuation, Accuracy ¹	DC - 18		-0.5,+0.8		dB
VSWR ²	DC - 4			1.20	:1
	4 - 8			1.25	
	8 - 12.4			1.30	
Input Power ³				5.0	W

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

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

3. Average power at +25°C ambient, derate linearly to 2 W at +100°C. Peak Power 125 W max. 5 μsec. pulse width, 100 Hz PRF.

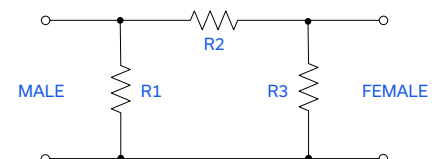
ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55°C to +100°C
Storage Temperature ⁴	-55°C to +100°C

4. With mated connectors. Unmated, +85°C max.

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

ELECTRICAL SCHEMATIC



REV. F
ECO-024323
BW-S20W5+
MCL NY
250127





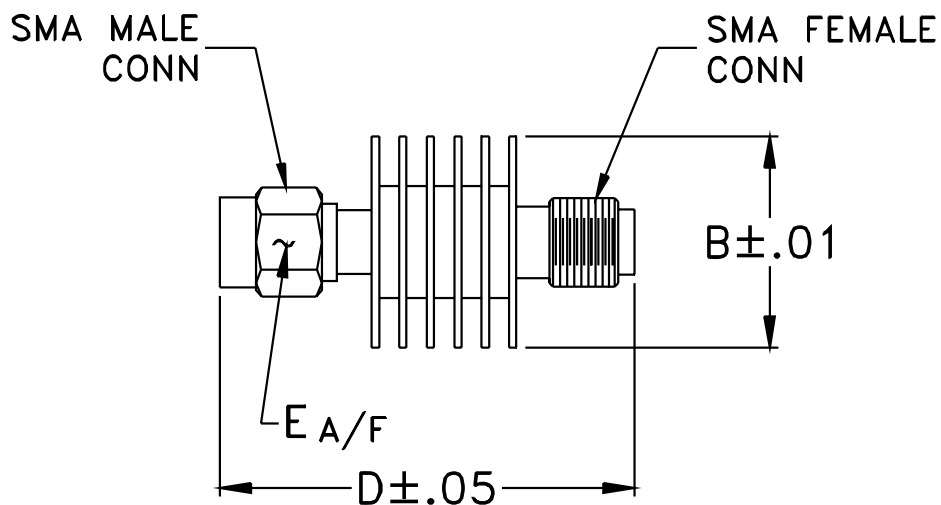
Mini-Circuits

COAXIAL

Precision Fixed Attenuator **BW-S20W5+**

50Ω 5 W 20 dB DC to 18 GHz SMA-Female to SMA-Male

OUTLINE DRAWING



OUTLINE DIMENSIONS ($\frac{\text{Inch}}$ $\frac{\text{mm}}$)

B	D	E	wt
.61	1.20	.312	grams
15.49	30.48	7.92	9.1



Mini-Circuits

COAXIAL

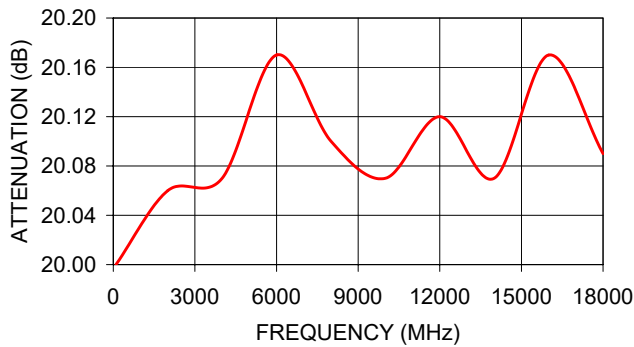
Precision Fixed Attenuator **BW-S20W5+**

50Ω 5 W 20 dB DC to 18 GHz SMA-Female to SMA-Male

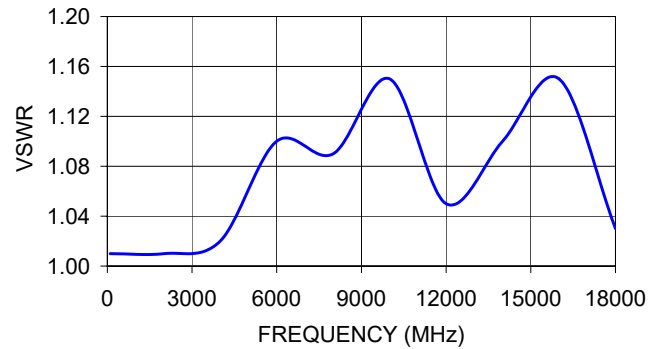
TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
100	20.00	1.01
2000	20.06	1.01
4000	20.07	1.02
6000	20.17	1.10
8000	20.10	1.09
10000	20.07	1.15
12000	20.12	1.05
14000	20.07	1.10
16000	20.17	1.15
18000	20.09	1.03

BW-S20W5+
ATTENUATION



BW-S20W5+
VSWR



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-Circuits' applicable established test performance criteria and measurement instructions.
- 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/terms/viewterm.html

