



Mini-Circuits®

COAXIAL

Precision Fixed Attenuator **BW-S30W20+**

50Ω 20 W 30 dB DC to 18 GHz SMA-Female to SMA-Male

FEATURES

- DC to 18 GHz
- Precision Attenuation
- Excellent VSWR, 1.30:1 Typ.
- Stainless Steel SMA-Male and Female Connectors

APPLICATIONS

- Impedance Matching
- Instrumentation
- Test Setups
- High Power Measurements



Generic photo used for illustration purposes only

Model No.	BW-S30W20+
Case Style	DC1660
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	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC		18	GHz
Attenuation	DC - 18		30		
	DC - 12.4	29.0		31.0	dB
	12.4 - 18	28.5		31.5	
VSWR	DC - 6			1.3	
	6 - 12.4			1.3	:1
	12.4 - 18			1.4	
Input Power ¹	DC - 18			20	W

1. Max. Power at +25°C ambient, derate linearly to 4 W +100°C. Peak power 500 W max. 5 μsec. pulse with, 100 Hz PRF.

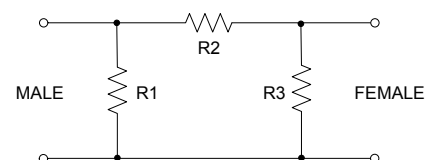
ABSOLUTE MAXIMUM RATINGS²

Parameter	Ratings
Operating Temperature ³	-55°C to +100°C
Storage Temperature	-55°C to +100°C

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

3. +85°C with output into open or short.

ELECTRICAL SCHEMATIC



REV. C
ECO-024518
BW-S30W20+
MCL NY
250213





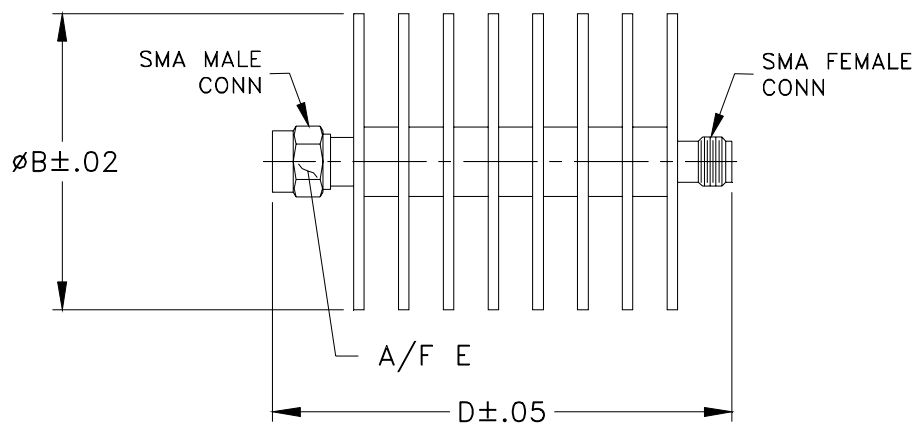
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OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch mm)

A	B	C	D	E	wt
--	1.50	--	2.33	.312	grams
--	38.10	--	59.18	7.92	49.2



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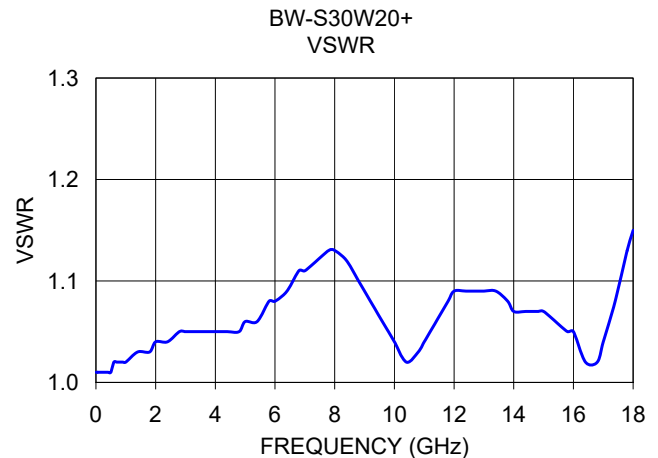
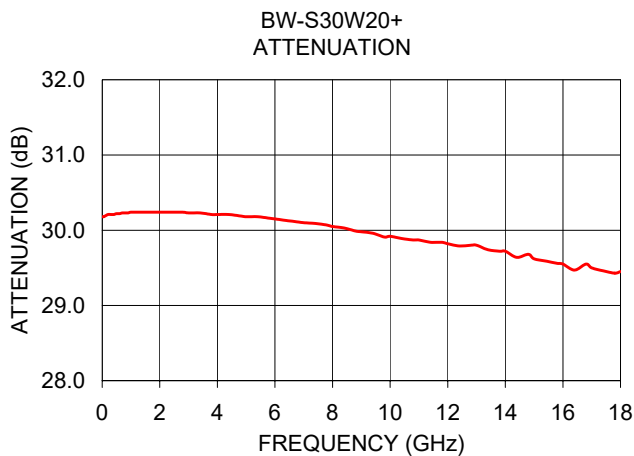
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TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.01	30.18	1.01
2.0	30.24	1.04
4.0	30.21	1.05
6.0	30.15	1.08
8.0	30.05	1.13
10.0	29.92	1.04
12.4	29.79	1.09
14.0	29.72	1.07
16.0	29.55	1.05
18.0	29.45	1.15



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

