

Coaxial

Precision Fixed Attenuator

BW-S30W20+

50Ω 20W 30dB DC to 18 GHz

Maximum Ratings

Operating Temperature	-55°C to 100°C**
Storage Temperature	-55°C to 100°C
**85°C with output into open or short.	
Permanent damage may occur if any of these limits are exceeded.	

Features

- DC to 18 GHz
- precise attenuation
- excellent VSWR, 1.30:1 typ
- stainless steel SMA male and female connectors

Applications

- matching
- instrumentation
- test set-ups
- high power measurements



Generic photo used for illustration purposes only

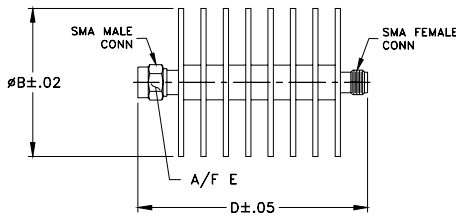
CASE STYLE: DC1660

Connectors	Model
SMA-F SMA-M	BW-S30W20+

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch/mm)

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

Electrical Specifications at 25°C

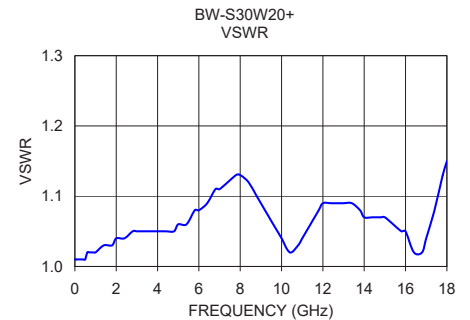
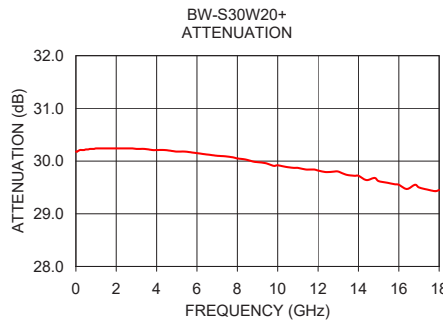
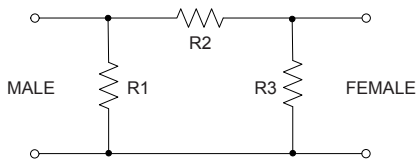
Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	18	GHz
Attenuation	DC - 18	—	30	—	dB
	DC - 12.4	29.0	—	31.0	
	12.4 - 18	28.5	—	31.5	
VSWR	DC - 6	—	—	1.30	:1
	6 - 12.4	—	—	1.3	
	12.4 - 18	—	—	1.4	
Input Power ¹		—	—	20	W

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

Typical Performance Data

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

Electrical Schematic



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.
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