

# Coaxial Precision Fixed Attenuator

## BW-S40W20+

50Ω 20W 40dB DC to 18 GHz

### Maximum Ratings

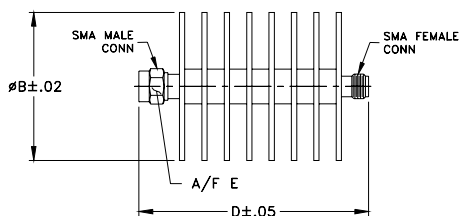
Operating Temperature -55°C to 100°C\*\*

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.

### 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

### Features

- DC to 18 GHz
- precise attenuation
- excellent VSWR, 1.25:1 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 SMA-F SMA-M Model BW-S40W20+

### +RoHS Compliant

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

### Electrical Specifications at 25°C

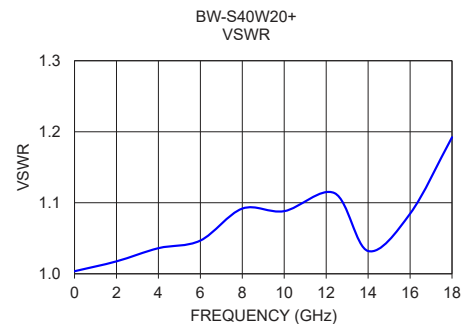
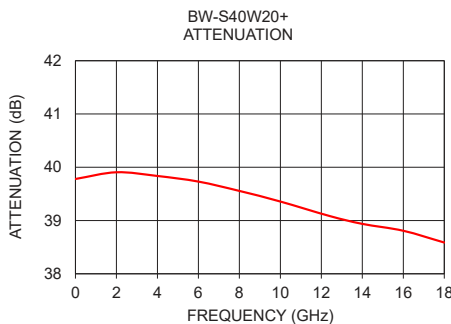
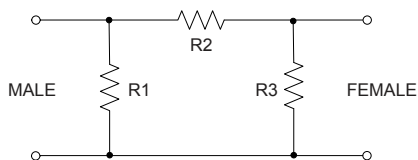
Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
<b>Frequency Range</b>		DC	—	18	GHz
<b>Attenuation</b>	DC - 18	—	40	—	dB
	DC - 12.4	38.5	—	41.0	
	12.4 - 18	38.0	—	41.5	
<b>VSWR</b>	DC - 6	—	1.08	1.3	:1
	6 - 12.4	—	1.15	1.3	
	12.4 - 18	—	1.25	1.4	
<b>Input Power<sup>1</sup></b>		—	—	20	W

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	39.78	1.00
2	39.91	1.02
4	39.84	1.04
6	39.73	1.05
8	39.56	1.09
10	39.36	1.09
12	39.08	1.11
14	38.94	1.03
16	38.81	1.08
18	38.59	1.19

### Electrical Schematic



### Notes

- A. 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.  
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
 C. 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



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