

# Precision Fixed Attenuator

## BW-N10W20+

50Ω 20W 10dB DC to 18 GHz



CASE STYLE: DC1645

Connectors	Model	Price	Qty.
N-Female N-Male	BW-N10W20+	\$119.95 ea.	(1-49)

### 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

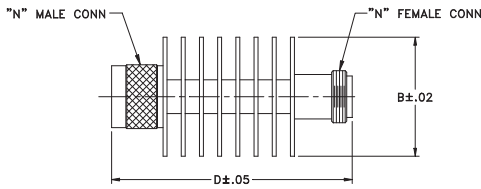
- DC to 18 GHz
- precise attenuation
- excellent VSWR, 1.30 typ
- stainless steel N male and female connectors

### Applications

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

**+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	--	3.04	--	grams
--	38.10	--	77.22	--	86.0

### Electrical Specifications at 25°C

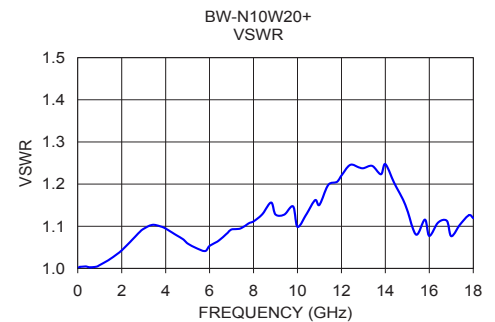
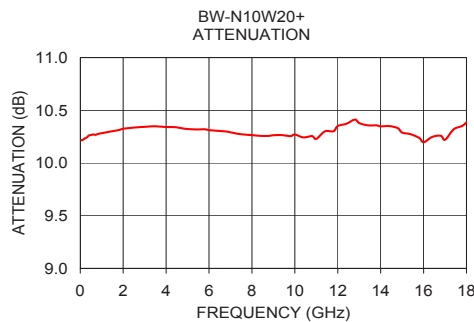
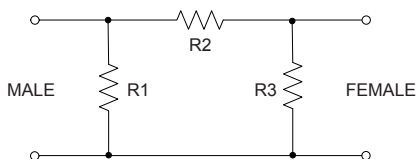
Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
<b>Frequency Range</b>		DC	—	18	GHz
<b>Attenuation</b>	DC - 18	—	10	—	dB
	DC - 12.4	9.25	—	10.75	
	12.4 - 18	9.0	—	11.0	
<b>VSWR</b>	DC - 6	—	—	1.3	:1
	6 - 12.4	—	—	1.3	
	12.4 - 18	—	—	1.4	
<b>Input Power<sup>1</sup></b>	DC - 18	—	—	20	W

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

### Typical Performance Data

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.05	10.22	1.00
2.0	10.33	1.04
4.0	10.34	1.09
6.0	10.31	1.05
8.0	10.27	1.11
10.0	10.27	1.10
12.4	10.37	1.25
14.0	10.35	1.25
16.0	10.20	1.08
18.0	10.39	1.12

### 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)

