

Coaxial

# N-Type Fixed Attenuator

**BW-30N100W+**

50Ω 100W 30dB DC to 6000 MHz

## The Big Deal

- Wideband operation, DC to 6 GHz
- High power handling, 100W
- Good flatness,  $\pm 0.65$  dB typ.



CASE STYLE: GH986

## Product Overview

Mini-Circuits' BW-30N100W+ is a 30 dB coaxial precision fixed attenuator providing high-power handling of up to 100W over the DC to 6 GHz frequency range. This model supports many high-power applications requiring precise attenuation over a broad frequency range including high-power measurement, matching, instrumentation, and more. It provides good VSWR (1.25 typ.), outstanding attenuation flatness ( $\pm 0.65$  dB) and excellent thermal stability from  $-55$  to  $100^{\circ}\text{C}$ . It features rugged construction with N-male to N-female connectors and heat dissipation fins for efficient cooling.

## Key Features

Feature	Advantages
Wideband operation, DC to 6 GHz	Wide frequency range makes the BW-30N100W+ suitable for a wide variety of applications.
High power handling to 100W	Supports high-power test lab and system applications including high-power measurement, matching, instrumentation, and more.
Good VSWR, 1.25:1 typ.	Well-matched for 50Ω systems; reduces effects of phase variation.
Good flatness, $\pm 0.65$ dB	Provides consistent attenuation performance across the entire frequency band.
Excellent thermal stability, $-55$ to $100^{\circ}\text{C}$	Designed with heat dissipation fins for efficient cooling, the BW-20N100W+ provides reliable performance without the need for external cooling equipment.
Compact size (3.46 x 3.46 x 6.36")	Outstanding performance capability and power handling with minimal space requirements.

### 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)



Coaxial

# N-Type Fixed Attenuator

50Ω 100W 30dB DC to 6000 MHz

BW-30N100W+



CASE STYLE: GH986

Connectors Model  
N-Male-N-Fem BW-30N100W+

**+RoHS Compliant**

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

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 125°C

Peak Power\* 1K Watt

\* 5μ second pulse 0.05% duty cycle.

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

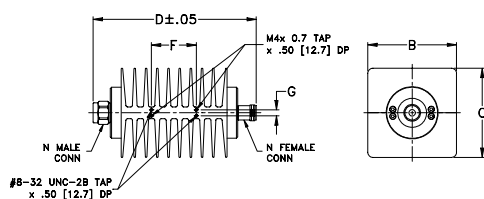
## Features

- wideband, DC to 6000 MHz
- excellent VSWR, 1.25:1
- N-Male and N-Female connectors

## Applications

- matching
- instrumentation
- test set-ups

## Outline Drawing



## Outline Dimensions (inch/mm)

B	C	D	E	F	G	wt.
3.46	3.46	6.36	--	1.75	.23	grams
87.88	87.88	161.54	--	44.45	5.84	1100.0

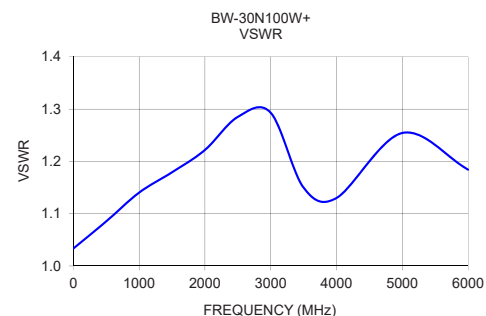
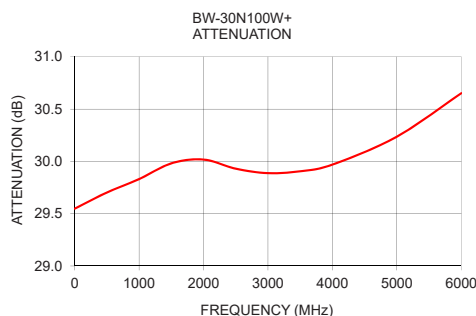
## Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	6000	MHz
Attenuation	DC - 6000	28.5	30	31.5	dB
VSWR	DC - 2500	—	1.15	1.35	:1
	2500 - 6000	—	1.30	1.45	
Input Power (Male) <sup>1</sup>	DC - 6000	—	—	100	W
Input Power (Female)	DC - 6000	—	—	20	W

1. Derate linearly to 20 Watt at 100°C.

## Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
0.3	29.55	1.03
500.0	29.70	1.09
1000.0	29.83	1.14
1500.0	29.98	1.18
2000.0	30.02	1.22
2500.0	29.93	1.29
3000.0	29.89	1.29
3500.0	29.91	1.15
4000.0	29.97	1.13
5000.0	30.24	1.25
6000.0	30.65	1.18



## 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)



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Attenuators - Interconnects](#) category:*

*Click to view products by [Mini-Circuits](#) manufacturer:*

Other Similar products are found below :

[R411803119](#) [R413806115](#) [R413808000](#) [R413810115](#) [R413850115](#) [R414510000](#) [R414701000](#) [R415303000](#) [BNC-13](#) [R411800121](#)  
[R411801121](#) [R412412124](#) [R412450000](#) [R413800000](#) [R413805000](#) [R413830000](#) [R413840115](#) [R414730000](#) [R415420000](#) [R415703000](#)  
[R416010000](#) [R420003110](#) [R411801000](#) [R411815121](#) [R413305000](#) [R413801000](#) [R414520000](#) [R411808121](#) [R412500124](#) [R412414124](#)  
[R412501124](#) [HMC-C584](#) [R413802000](#) [R412400124](#) [R411700124](#) [R417310130](#) [R411801119](#) [R412419124](#) [R411703124](#) [R412401124](#)  
[R443131000](#) [R417130110](#) [R414700000](#) [R414505000](#) [R411802119](#) [R417720128](#) [R420706110](#) [R413811000](#) [R413803115](#) [R414501000](#)