

Coaxial N-Type Fixed Attenuator **BW-20N100W+**

50Ω 100W 20dB DC to 6000 MHz

The Big Deal

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



CASE STYLE: GH986

Product Overview

Mini-Circuits' BW-20N100W+ is a 20 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 of 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 (± 0.65 dB) and excellent thermal stability from -55 to 100°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-20N100W+ 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, ± 0.65 dB	Provides consistent attenuation performance across the entire frequency band.
Rugged construction	Excellent durability for a long lifetime of use.
Excellent thermal stability, -55 to 100°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 3.36")	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



Coaxial

N-Type Fixed Attenuator

50Ω 100W 20dB DC to 6000 MHz

Maximum Ratings

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

BW-20N100W+



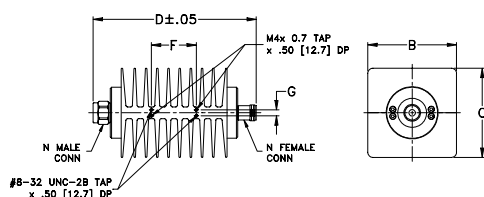
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Connectors Model
N-Male-N-Fem BW-20N100W+

+RoHS Compliant

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

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

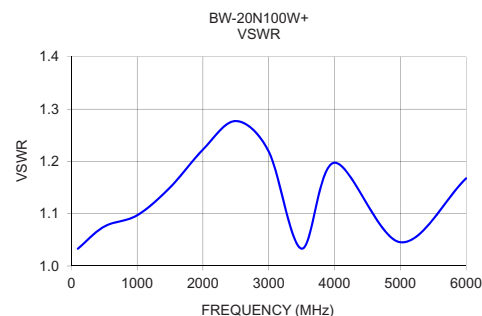
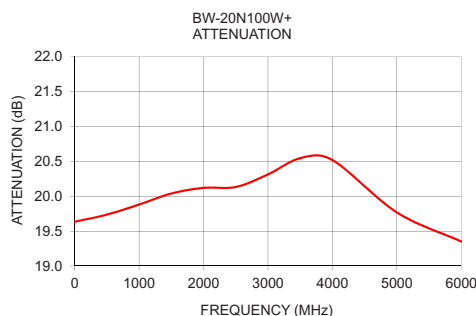
Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	6000	MHz
Attenuation	DC - 6000	18.5	20	21.5	dB
VSWR	DC - 2500	—	1.15	1.35	:1
	2500 - 6000	—	1.30	1.45	
Input Power (Male) ¹	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	19.57	1.03
500.0	19.74	1.08
1000.0	19.88	1.10
1500.0	20.04	1.15
2000.0	20.12	1.22
2500.0	20.13	1.28
3000.0	20.31	1.22
3500.0	20.55	1.03
4000.0	20.52	1.20
5000.0	19.77	1.05
6000.0	19.35	1.17



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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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