



THE BIG DEAL

- DC to 6 GHz
- High Power Handling, 100 W
- Excellent VSWR, 1.25:1 Typ.
- N-Male and N-Female Connectors

APPLICATIONS

- Impedance Matching
- Instrumentation
- Test Setups



Generic photo used for illustration purposes only

Model No.	BW-20N100W+
Case Style	GH986
Connectors	N-Male to N-Female

+RoHS Compliant

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

PRODUCT OVERVIEW

Mini-Circuits' BW-20N100W+ is a 20 dB coaxial precision fixed attenuator providing high power handling of up to 100 W 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 100 W	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 6.36")	Outstanding performance capability and power handling with minimal space requirements.

REV. B
ECO-024663
BW-20N100W+
MCL NY
250225



ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC		6	GHz
Attenuation	DC - 6	18.5	20	21.5	dB
VSWR	DC - 2.5		1.15	1.35	:1
	2.5 - 6		1.30	1.45	
Input Power (Male) ¹	DC - 6			100	W
Input Power (Female)	DC - 6			20	W

1. Derate linearly to 20 W at +100°C.

ABSOLUTE MAXIMUM RATINGS

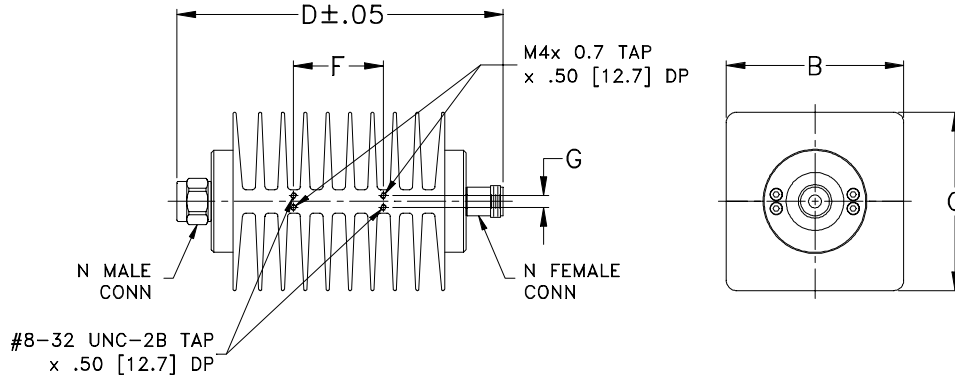
Parameter	Ratings
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +125°C
Peak Power ²	1K Watt

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

2. 5 μ second pulse 0.05% duty cycle.



OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch/mm)

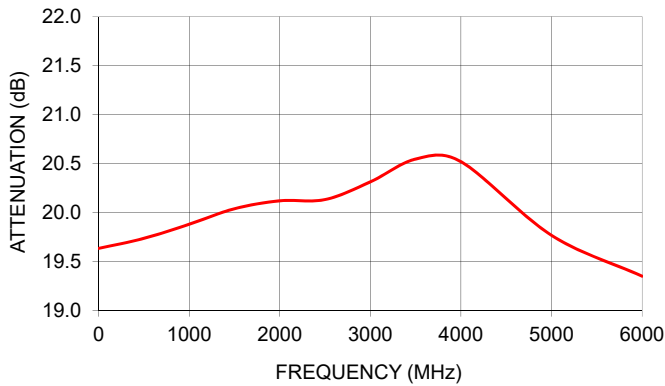
B	C	D	E	F	G	wt.
3.46	3.46	6.36	--	1.75	.23	grams
87.88	87.88	161.54	--	44.45	5.84	1100.0



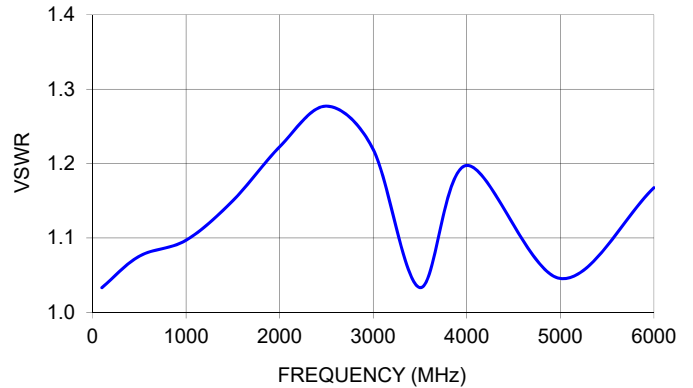
TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
0.3	19.57	1.02
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

BW-20N100W+
ATTENUATION



BW-20N100W+
VSWR



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-Circuits' 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/terms/viewterm.html