# Coaxial Precision Fixed Attenuator BW-N30W50+

30 dB DC to 18 GHz **50**Ω

## **The Big Deal**

- High Power Handling, 50W
- Excellent VSWR, 1.30 typ.
- Wide Frequency Range, DC to 18 GHz

## Product Overview

The BW-N30W50+ 30 dB precision fixed attenuator achieves outstanding flatness versus frequency from DC to 18 GHz while handling high power signals up to 50W. High power handling, excellent VSWR, and precise performance make the BW-N30W50+ ideal for a variety of test lab and system applications including high power measurement, high power termination, improving matching, test setups, and other functions demanding accurate attenuation and high power capability.

## **Key Features**

Feature	Advantages
Wide Frequency Range	DC to 18 GHz frequency range gives the BW-N30W50+ attenuator versatile application functionality.
Excellent VSWR, 1.30 typ.	Well-matched for 50 $\Omega$ systems; reduces effects of phase variation.
Flat attenuation	Accurate performance within ±0.5 dB over the full frequency range.
Rugged Construction	Excellent durability for a long lifetime of use.
Heat Dissipation Fins	Designed to dissipate heat efficiently, the BW-N30W50+ requires no external cooling equipment.
Compact Size (2.65" x 2.65" x 4.5")	Outstanding performance capability and power handling without prohibitive space constraints.



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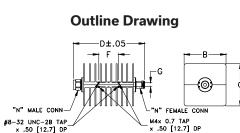
#### DC to 18 GHz 50Ω 50W 30dB

#### **Maximum Ratings**

Operating Temperature	-55°C to 100°C**				
Storage Temperature	-55°C to 100°C				
**85°C with output into open or short.					

#### **Coaxial Connections**

IN (50W)	N-Male
OUT	N-Female



## Outline Dimensions (mch )

В	С	D	E	F	G	wt.
2.65	2.65	4.50		1.25	.25	grams
67.31	67.31	114.30		31.75	6.35	720.0

## **Features**

- DC to 18 GHz
- precise attenuation
- excellent VSWR, 1.30 typ
- passivated stainless steel N-type connectors
- unidirectional

### Applications

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



Generic photo used for illustration purposes only CASE STYLE: GH1788 Model Connectors BW-N10W50+ N-type

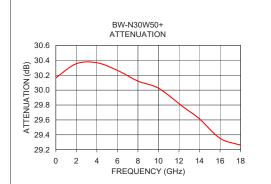
+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

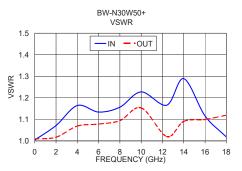
### Electrical Specifications at 25°C

Parameter		Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range			DC	_	18	GHz
Attenuation		DC - 18	28.50	30.00	31.50	dB
VSWR	IN	DC - 18	-	_	1.45	:1
	OUT	DC - 18	_	_	1.5	
Input Power <sup>1</sup>		DC - 18	-	_	50	W

1. Max. power at 25°C ambient, derate linearly to 20W at 100°C. Peak power 500W max. 5µsec. pulse width, 100Hz PRF, input N-Male. 5W max. at N-Female.

#### **Typical Performance Data** Attenuation VSWR Frequency (GHz) (dB) (:1) IN OUT 0.01 30.17 1.00 1.01 2.0 30.36 1.07 1.02 4.0 30.37 1.16 1.07 6.0 30.27 1.13 1.08 8.0 30.12 1.09 1.16 10.0 30.03 1.23 1.15 12.4 29.78 1.17 1.02 140 29.61 1.29 1.09 29.35 16.0 1.12 1.10 29.26 18.0 1.02 1.12





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**Simplified Electrical Schematic**  $\Lambda\Lambda\Lambda$ 

