# Precision Fixed Attenuator BW-Kx-2W44+ Series

1,2,3,4,5,6,10,20 dB  $50\Omega$ 2W DC to 40 GHz

## The Big Deal

- Extremely wideband, DC to 40 GHz
- K 2.92 mm Female 2.92 mm Male
- Outstanding attenuation flatness
- Excellent VSWR, 1.20 typ.



## **Product Overview**

The BW-Kx-2W44+ series of precision fixed attenuators achieves extremely wide frequency range with excellent flatness of attenuation. Available in a variety of attention values for different requirements, these units support a broad range of system and testing applications. Precise performance, excellent VSWR (1.2:1 typ.) and rugged construction make these models ideal solutions for systems requiring precise attenuation across very wide frequency range.

## **Key Features**

Feature	Advantages		
Extremely wideband, DC to 40 GHz	Ideal for an exceptionally wide variety of applications.		
Excellent VSWR, 1.20 typ.	Efficient power utilization with low power reflected back to source.		
Outstanding attenuation flatness	Provides precise, consistent attenuation across the entire frequency band, ideal for broadband and multi-band usage.		
Passivated stainless steel connectors	Rugged construction withstands harsh environmental conditions for high reliability and long life of use.		

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.

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## Coaxial

# **Precision Fixed Attenuator**

## BW-K2-2W44+

DC to 40 GHz  $50\Omega$ **2W** 2dB

### **Maximum Ratings**

Operating Temperature -55°C to 100°C\*\* Storage Temperature -55°C to 100°C

\*\*with mated connectors. Unmated, 85°C max.
Permanent damage may occur if any of these limits are exceeded

### **Features**

• DC to 40 GHz

**Applications** 

instrumentation

matching

• test set-ups

- · precise attenuation
- excellent VSWR, 1.20 typ.
- · passivated stainless steel connectors
- can interface with SMA, K & 3.5mm connectors

Generic photo used for illustration purposes only

CASE STYLE: FF1653

Connectors

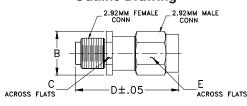
2.92mm Female - 2.92 Male BW-K2-2W44+

### +RoHS Compliant

Model

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

### **Outline Drawing**



## Outline Dimensions (inch )

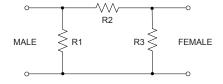
С D В Е .36 .312 .88 .312 grams 9 14 22.35 7.92 7.92 4.73

## Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC	_	40	GHz
Attenuation <sup>1</sup>	DC - 40	_	2	_	
	DC - 26.5	1.5	_	2.5	dB
	26.5 - 40	1.5	_	2.8	
	DC - 18	_	1.10	1.3	
VSWR	18 - 26.5	_	1.15	1.4	:1
	26.5 - 40	_	1.4	1.5	
Input Power <sup>2</sup>	DC - 40	_	_	2	W

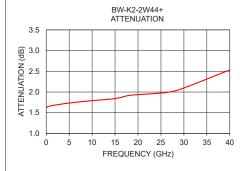
1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/dB/°C typ. 2. Max. power at 25°C ambient, derate linearly to 0.575W at 100°C.

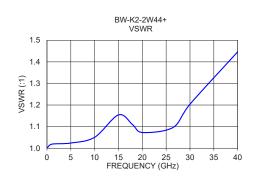
## **Simplified Electrical Schematic**



### **Typical Performance Data**

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.01	1.63	1.00
1.00	1.67	1.02
5.00	1.73	1.02
10.00	1.79	1.05
15.00	1.84	1.15
18.00	1.92	1.11
20.00	1.94	1.07
26.50	1.99	1.10
30.00	2.10	1.20
40.00	2.53	1.45





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