Precision Fixed Attenuator **BW-K2-2W44+** 

Mini-Circuits

cuits 50 $\Omega$  2 W 2 dB DC to 40 GHz 2.92mm-Male to 2.92mm-Female

#### **THE BIG DEAL**

- Extremely Wideband, DC to 40 GHz
- Excellent VSWR, 1.20:1 Typ.
- Outstanding Attenuation Flatness
- Can interface with SMA, K & 3.5mm Connectors



Generic photo used for illustration purposes only

Model No.	BW-K2-2W44+	
Case Style	FF1653	
Connectors	2.92mm-Male to 2.92mm-Female	

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

# InstrumentationTest Setups

APPLICATIONSImpedance Matching

#### **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 lab and system applications up to millimeter wave bands.	
Excellent VSWR, 1.20:1 Typ.	Efficient power utilization with minimal signal 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.	

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# Precision Fixed Attenuator **BW-K2-2W44+**

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50Ω 2 W 2 dB DC to 40 GHz 2.92mm-Male to 2.92mm-Female

#### **ELECTRICAL SPECIFICATIONS AT +25°C**

Parameter	Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC		40	GHz
	DC - 40		2		
Attenuation <sup>1</sup>	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: .0004 dB/dB/°C Typ.

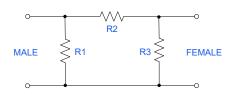
2. Max. power at +25°C ambient, derate linearly to 0.575 W at +100°C.

#### **ABSOLUTE MAXIMUM RATINGS**

Parameter	Ratings
Operating Temperature <sup>3</sup>	-55°C to +100°C
Storage Temperature	-55°C to +100°C

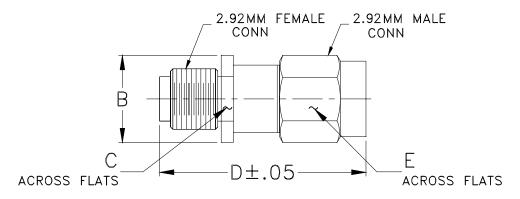
Permanent damage may occur if any of these limits are exceeded. 3. With mated connectors. Unmated, +85°C Max.

#### **ELECTRICAL SCHEMATIC**





#### **OUTLINE DRAWING**



## OUTLINE DIMENSIONS (Inch)

В	С	D	E	wt
.36	.312	.88	.312	grams
9.14	7.92	22.35	7.92	4.73

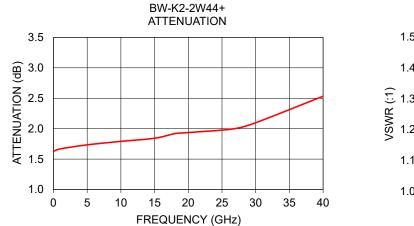
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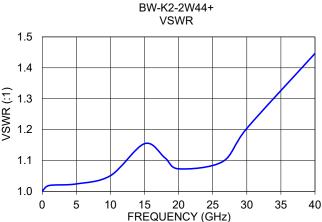
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#### **TYPICAL PERFORMANCE DATA AND CHARTS**

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





#### 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
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