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# Precision Fixed Attenuator

**BW-K4-2W44+**

50Ω 2 W 4 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

## APPLICATIONS

- Impedance Matching
- Instrumentation
- Test Setups



Generic photo used for illustration purposes only

Model No.	BW-K4-2W44+
Case Style	FF1653
Connectors	2.92mm-Male to 2.92mm-Female

### +RoHS Compliant

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

## 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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## ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC		40	GHz
Attenuation <sup>1</sup>	DC - 40		4		dB
	DC - 26.5	3.25		4.75	
	26.5 - 40	3.4		5.0	
VSWR	DC - 18		1.01	1.3	:1
	18 - 26.5		1.05	1.4	
	26.5 - 40		1.35	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.

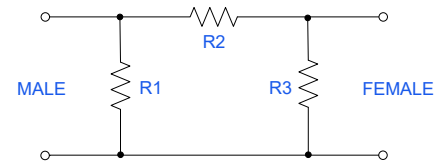
## ABSOLUTE MAXIMUM RATINGS

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





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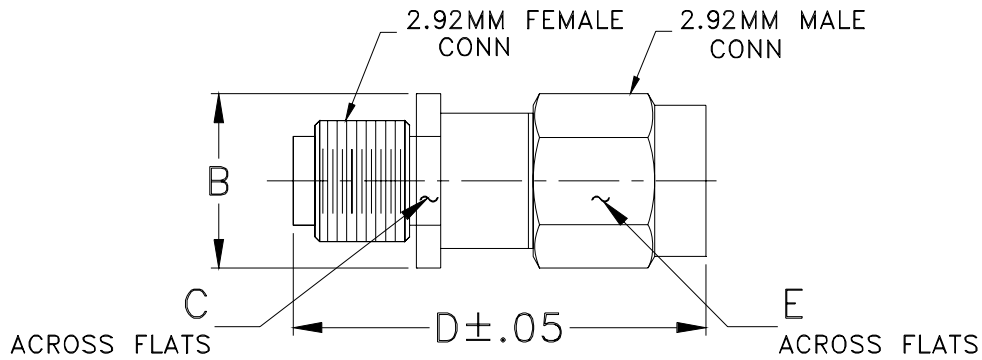
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## OUTLINE DRAWING



## OUTLINE DIMENSIONS (Inch mm)

B	C	D	E	wt
.36	.312	.88	.312	grams
9.14	7.92	22.35	7.92	4.73



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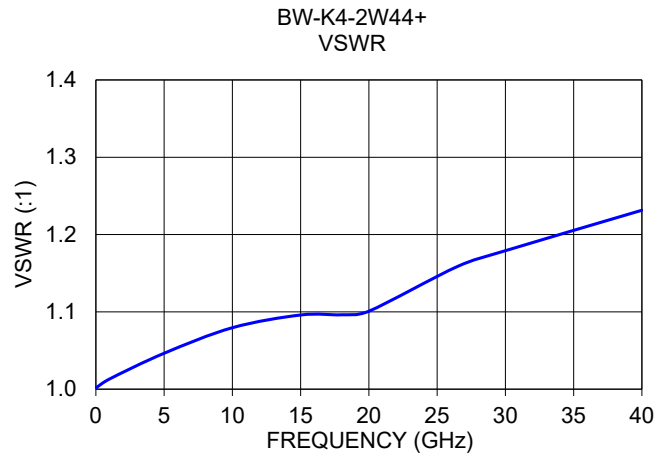
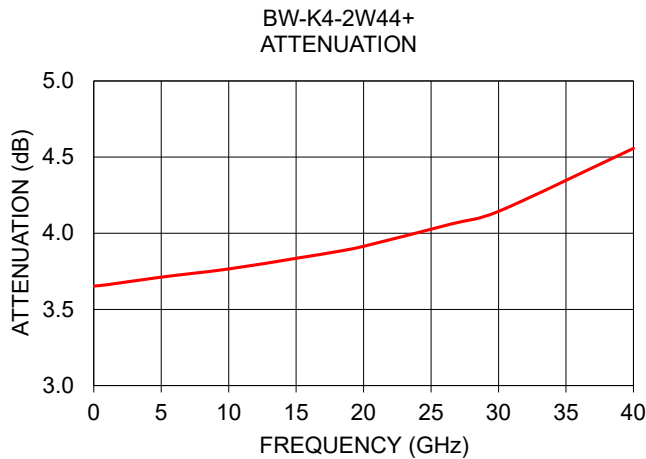
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## TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.01	3.65	1.00
1.00	3.66	1.01
5.00	3.71	1.05
10.00	3.77	1.08
15.00	3.84	1.10
18.00	3.88	1.10
20.00	3.91	1.10
26.50	4.06	1.16
30.00	4.14	1.18
40.00	4.56	1.23



### NOTES

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- 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](http://www.minicircuits.com/terms/viewterm.html)

