

Precision Fixed Attenuator BW-K6-2W44+

500 2 W 6 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-K6-2W44+		
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

APPLICATIONS

- Impedance Matching
- Instrumentation
- Test Setups

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.		

REV. C ECO-024604 BW-K6-2W44+ MCI NY





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ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC		40	GHz
Attenuation ¹	DC - 40		6		dB
	DC - 26.5	5.5		6.5	
	26.5 - 37	5.2		6.8	
	37 - 40	5.2		7.2	
VSWR	DC - 18		1.06	1.3	
	18 - 26.5		1.09	1.4	:1
	26.5 - 40		1.50	1.5	
Input Power ²	DC - 40			2	W

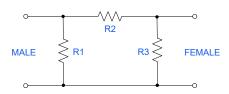
^{1.} At +25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004 dB/dB/°C Typ.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings	
Operating Temperature ³	-55°C to +100°C	
Storage Temperature	-55°C to +100°C	

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

ELECTRICAL SCHEMATIC



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

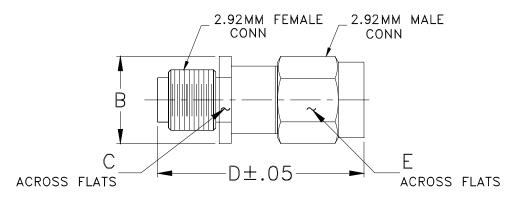
^{3.} With mated connectors. Unmated, +85°C Max.



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OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch)

В C D Ε wt .312 .36 .88 .312 grams 7.92 22.35 9.14 7.92 4.73

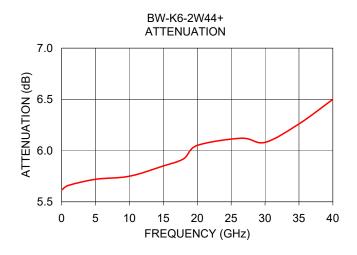


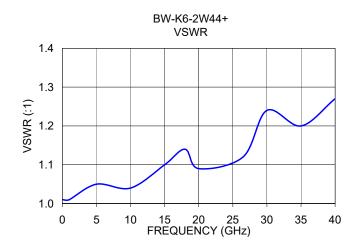
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TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.10	5.62	1.01
1.00	5.66	1.01
5.00	5.72	1.05
10.00	5.75	1.04
15.00	5.85	1.10
18.00	5.92	1.14
20.00	6.05	1.09
26.50	6.12	1.12
30.00	6.08	1.24
40.00	6.50	1.27





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.

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