



Mini-Circuits

COAXIAL MILLIMETER WAVE

# Precision Fixed Attenuator **BW-V4-1W54+**

50Ω 1 W 4 dB DC to 50 GHz 2.4 mm Female to 2.4 mm Male

## THE BIG DEAL

- DC to 50 GHz
- Precise Attenuation
- Excellent VSWR, 1.20 Typ.
- Passivated Stainless Steel Connectors



Generic photo used for illustration purposes only

Model No.	BW-V4-1W54+
Case Style	DJ2264
Connectors	2.4 mm Female -2.4 mm Male

## +RoHS Compliant

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

## APPLICATIONS

- Matching
- Instrumentation
- Test Setups

## PRODUCT OVERVIEW

The BW-VX-1W54+ Series of precision fixed attenuators achieves extremely wide frequency range with excellent VSWR. Available in a variety of attenuation values for different requirements, these units support a broad range of system and testing applications. Precise performance, excellent VSWR and wide band features make these models ideal solutions for systems requiring precise attenuation across very wide frequency range.

## KEY FEATURES

Feature	Advantages
Extremely Wideband, DC to 50 GHz	Ideal for an exceptionally wide variety of applications.
Excellent VSWR, 1.20 Typ.	Efficient power utilization with low power reflected back to source.
Passivated Stainless Steel Connectors	Rugged construction withstands harsh environmental conditions for high reliability and long life of use.





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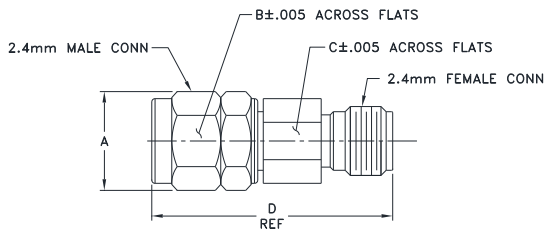
50Ω 1 W 4 dB DC to 50 GHz 2.4 mm Female to 2.4 mm Male

### ABSOLUTE MAXIMUM RATINGS

Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C

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

### OUTLINE DRAWING



### OUTLINE DIMENSIONS (Inch mm)

A	B	C	D	E	wt
0.36	0.312	0.281	0.871	--	grams
9.14	7.93	7.14	22.10	--	5.44

### ELECTRICAL SPECIFICATIONS AT +25°C

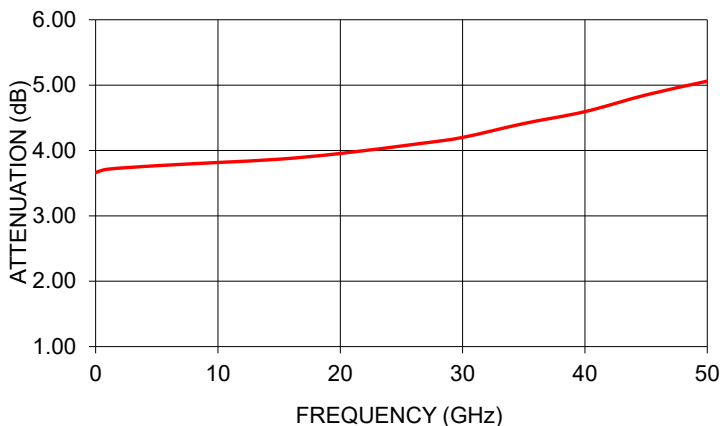
Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		50	GHz
Attenuation	DC - 26.5	3.5	3.9	4.5	dB
	26.5 - 40	3	4.3	5	
	40 - 50	2.5	4.8	5.5	
VSWR	DC - 26.5		1.06	1.35	:1
	26.5 - 40		1.20	1.6	
	40 - 50		1.37	1.75	
Input Power <sup>1</sup>	DC - 50			1	W

1. Max. power at +25°C ambient, derate linearly to 0.1 W at +100°C.

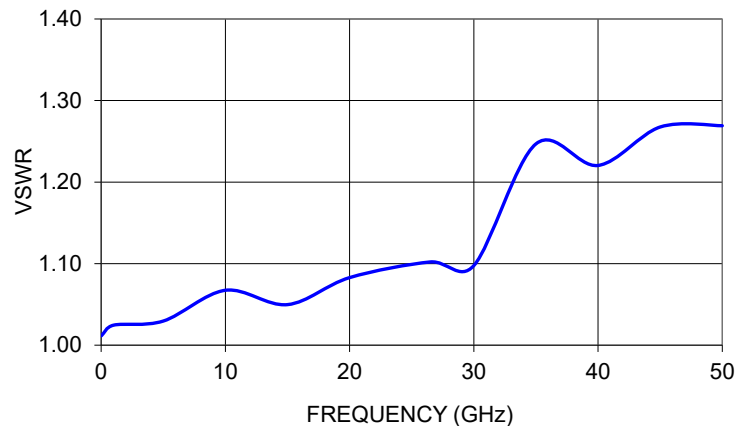
### TYPICAL PERFORMANCE DATA

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.01	3.66	1.01
1.00	3.71	1.02
5.00	3.77	1.03
10.00	3.82	1.07
15.00	3.87	1.05
20.00	3.95	1.08
26.50	4.11	1.10
30.00	4.20	1.10
35.00	4.41	1.25
40.00	4.59	1.22
45.00	4.85	1.27
50.00	5.06	1.27

BW-V4-1W54+  
ATTENUATION



BW-V4-1W54+  
VSWR



#### 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-Circuit's 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)

