Coaxial, Millimeter Wave

Precision Fixed Attenuator

BW-VX-1W54+ Series

3,6,10,20 dB 50Ω 1W DC to 50 GHz

The Big Deal

- Extremely wideband, DC to 50 GHz
- 2.4mm Female 2.4 mm Male
- Excellent VSWR



Product Overview

The BW-VX-1W54+ Series of precision fixed attenuators achieves extremely wide frequency range with excellent VSWR. 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 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. | | |

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.

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 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.ninicircuits.com/MCLStore/terms.jsp

Coaxial, Millimeter Wave Precision Fixed Attenuator

BW-V3-1W54+

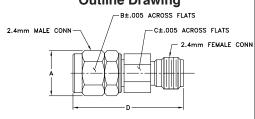
DC to 50 GHz 50Ω **1W** 3dB

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)

| wt | Ε | D | С | В | Α |
|-------|---|-------|-------|-------|-------|
| grams | | 0.871 | 0.281 | 0.312 | 0.360 |
| 5.44 | | 22.12 | 7.14 | 7.93 | 9.14 |

Features

- DC to 50 GHz
- precise attenuation
- excellent VSWR, 1.20 typ.
- · passivated stainless steel connectors

CASE STYLE: DJ2264

Connectors Model BW-V3-1W54+ 2.4mm-Female - 2.4mm Male

+RoHS Compliant

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

Applications

- matching
- instrumentation
- test set-ups

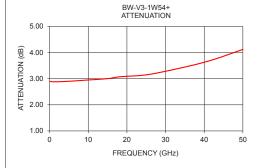
Electrical Specifications at 25°C

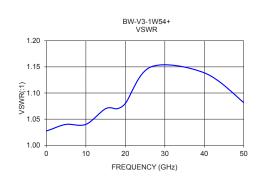
| Parameter | Condition (GHz) | Min. | Тур. | Max. | Unit |
|--------------------------|-----------------|------|------|------|------|
| Frequency Range | | DC | _ | 50 | GHz |
| | DC - 26.5 | 2.5 | 3.0 | 3.5 | |
| Attenuation | 26.5 - 40 | 2.0 | 3.4 | 4.0 | dB |
| | 40 - 50 | 1.5 | 3.8 | 4.5 | |
| | DC - 26.5 | _ | 1.1 | 1.35 | |
| VSWR | 26.5 - 40 | _ | 1.2 | 1.6 | :1 |
| | 40 - 50 | _ | 1.1 | 1.75 | |
| Input Power ¹ | DC - 50 | _ | _ | 1 | W |

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

Typical Performance Data

| Frequency (GHz) | Attenuation (dB) | VSWR (:1) | |
|--------------------|---------------------|--------------|--|
| 0.01 | 2.90 | 1.03 | |
| 1.00 | 2.88 | 1.03 | |
| 5.00 | 2.90 | 1.04 | |
| 10.00 | 2.95 | 1.04 | |
| 15.00 | 3.00 | 1.07 | |
| 18.00 | 3.07 | 1.07 | |
| 20.00 | 3.09 | 1.08 | |
| 26.50 | 3.18 | 1.15 | |
| 40.00 | 3.63 | 1.14 | |
| 50.00 | 4.12 | 1.08 | |





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.

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 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/MCLStore/terms.jsp

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Mini-Circuits:
BW-V3-1W54+