

## COAXIAL

## Fixed Attenuator **BW-W10-0.5W114+**

0.5 W 10 dB DC to 110 GHz 1.0 mm Male to Female 50Ω

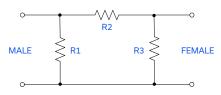
#### **KEY FEATURES**

- Wideband, DC to 110 GHz
- 1.0 mm Male to Female Connectors
- Excellent VSWR, 1.3 typ.
- 0.5 W Power Handling



Generic photo used for illustration purposes only

#### **FUNCTIONAL DIAGRAM**



#### HANDLING INSTRUCTIONS

1.0 mm connectors require specific handling and torque values. See Mini-Circuits Application Note AN-71-001 for detail.

#### **APPLICATIONS**

- Optical communications
- Test & Measurement
- · High-speed data systems
- Instrumentation
- Precision Measurements

#### **PRODUCT OVERVIEW**

The Mini-Circuits catalog model BW-W10-0.5W114+ is a precision fixed 10 dB 0.5 W attenuator. BW-W10-0.5W114+ operates over an extremely wide frequency range with excellent VSWR and supports a broad range of system and testing applications. Precise performance, excellent VSWR and wide bandwidth make this model an ideal solution for systems requiring accurate attenuation across a very wide frequency range.

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

Parameter	Frequency (GHz)	Min.	Тур.	Max.	Units
Frequency Range		DC	-	110	GHz
	DC-26.5	8.7	9.7	10.8	
	26.5-40	8.7	10.0	11.3	
Attenuation	40-60	8.5	10.4	11.5	dB
	60-90	8.2	10.7	11.8	
	90-110	8.0	10.6	12.0	
VSWR	DC-26.5	-	1.1	1.4	
	26.5-40	-	1.1	1.6	
	40-60	-	1.3	1.7	:1
	60-90	-	1.5	2.1	
	90-110	-	1.7	2.7	

#### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

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

<sup>1.</sup> Permanent damage may occur if any of these limits are exceeded.

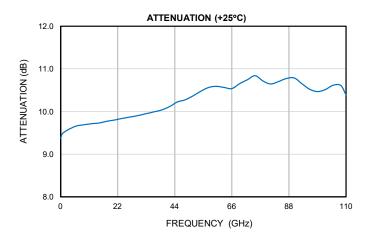


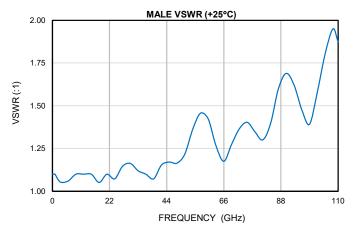
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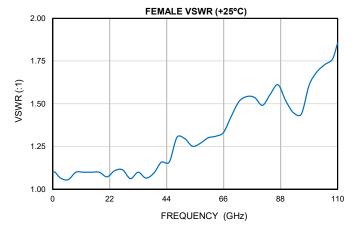
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50Ω 0.5 W 10 dB DC to 110 GHz 1.0 mm Male to Female

### **TYPICAL PERFORMANCE GRAPHS**







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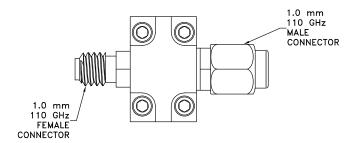
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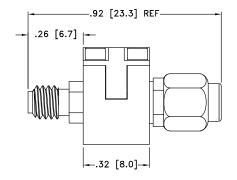
0.5 W 10 dB DC to 110 GHz 1.0 mm Male to Female 50Ω

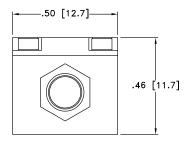
### **COAXIAL CONNECTIONS**

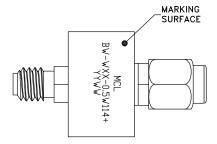
Description	RF1 PORT	RF2 PORT	
Connector Type	1.0 mm Male	1.0 mm Female	
Orientation	Straight	Straight	

#### **CASE STYLE DRAWING**









Weight: 7.0 grams MAX

Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03[.76]; 3 PL±.015[.38] inches[mm]

PRODUCT MARKING\*: BW-W10-0.5W114+

\*Marking may contain other features or characters for internal lot control.



## COAXIAL Fixed Attenuator **BW-W10-0.5W114+**

0.5 W 10 dB DC to 110 GHz 1.0 mm Male to Female 50Ω

### ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

	Data	
Performance Data & Graphs	Graphs	
	S-Parameter (S2P Files) Data Set (.zip file)	
Case Style	FF3501	
RoHS Status	Compliant	
Environmental Ratings	ENV142	

**CLICK HERE** 

- 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/terms/viewterm.html

