COAXIAL MILLIMETER WAVE

Precision Fixed Attenuator BW-VF20-1W54+

50Ω 1W 20dB DC to 50 GHz 2.4mm Female to Female

THE BIG DEAL

- DC to 50 GHz
- 2.4mm Female to Female Connectors
- Excellent VSWR, 1.17 typ.
- Passivated stainless steel connectors
- 1W Power Handling

Generic photo used for illustration purposes only

Model No.	BW-VF20-1W54+
Case Style	DJ2477-4
Connectors	2.4mm Female to Female

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

APPLICATIONS

- 5G MIMO and Back Haul Radio Systems
- LTE & 5G MIMO Infrastructure
- Broadband Telecom
- Satellite Communications
- Test and Measurement Equipment
- Radar, EW, and ECM Defense Systems

PRODUCT OVERVIEW

The BW-VF20-1W54+ is a 2.4mm female to female variant of Mini-Circuits catalog model BW-V20-1W54+ (2.4mm female to male). This precision fixed 20dB 1W attenuator achieves extremely wide frequency range with excellent VSWR and supports a broad range of system and testing applications. Precise performance, excellent VSWR and wide band features make this model ideal solutions for systems requiring accurate attenuation across very wide frequency range.

KEY FEATURES

Features	Advantages
Extremely wideband, DC to 50 GHz	Ideal for an exceptionally wide variety of applications.
Excellent VSWR, 1.17 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.

REV. OR
ECO-015691
BW-VF20-1W54+
MCL NY
221114

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ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC	-	50	GHz
Attenuation	DC-26.5	19.3	19.8	20.8	dB
	26.5-40	18.8	20.2	21.2	
	40-50	18.0	20.6	22.0	
VSWR	DC-26.5	-	1.07	1.35	:1
	26.5-40	-	1.24	1.6	
	40-50	-	1.21	1.75	
Input Power[1]	DC-50	-	-	1	W

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

MAXIMUM RATINGS

Parameter	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. Connectors need to be mated to ensure no damage occur over temperature extremes

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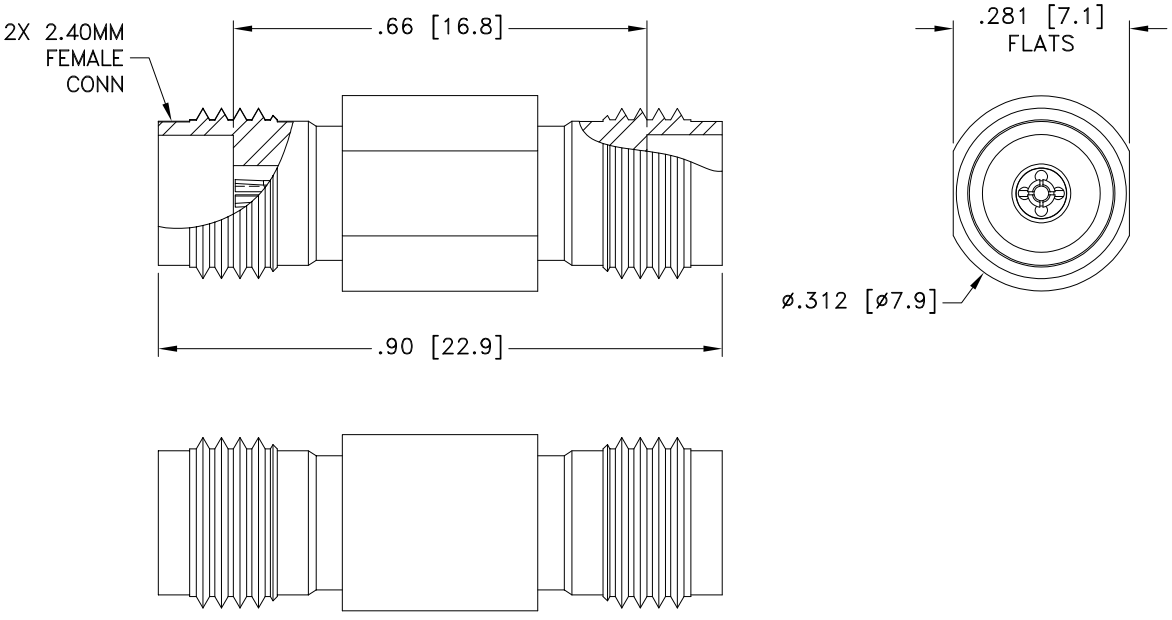
COAXIAL CONNECTIONS

Input	2.4mm Female
Output	2.4mm Female

CONNECTOR INFORMATION

Description	Connector 1	Connector 2
Type	2.4mm Female	2.4mm Female
Orientation	Straight	
Mounting Type	Standard	
Impedance	50 Ω	
Contact	BeCu, Gold Plated	
Housing	Passivated Stainless Steel	
Dielectric	High Temperature Plastic Bead	

OUTLINE DRAWING



Weight: 3.44 grams
Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03[.76]; 3 Pl. ±.010[.25]

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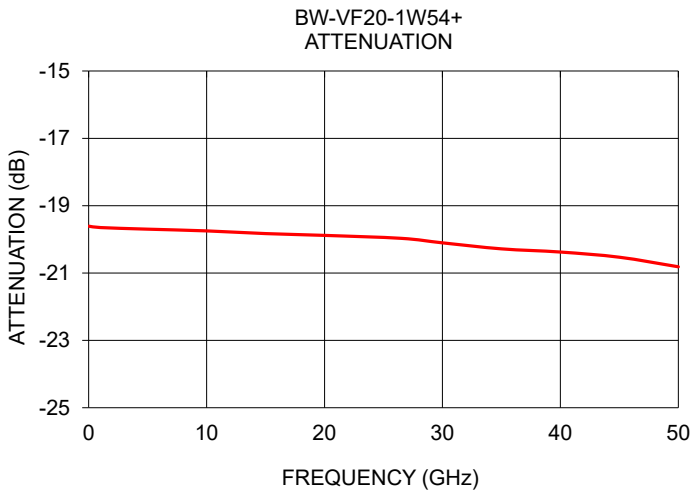
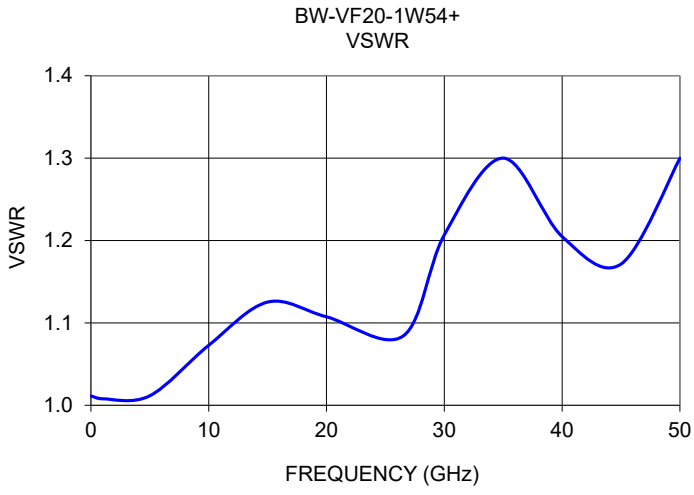
TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.01	19.6	1.01
1.0	19.6	1.01
5.0	19.7	1.01
10.0	19.7	1.07
15.0	19.8	1.13
20.0	19.8	1.11
26.5	19.9	1.08
30.0	20.1	1.21
35.0	20.2	1.30
40.0	20.3	1.20
45.0	20.5	1.17
50.0	20.8	1.30





NOTES

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