COAXIAL MILLIMETER WAVE

Precision Fixed Attenuator BW-S6-2W263A+

50Ω 2 W 6 dB DC to 26 GHz SMA Female to SMA Male

THE BIG DEAL

- DC to 26 GHz
- Precise Attenuation
- Excellent VSWR, 1.05 Typ.
- Passivated Stainless Steel Connectors



Generic photo used for illustration purposes only

Model No.	BW-S6-2W263A+
Case Style	FF3336
Connectors	SMA Female to SMA Male

APPLICATIONS

- Matching
- Instrumentation
- Test Setups

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

PRODUCT OVERVIEW

Mini-Circuits' BW-SX-2W263A+ Series of precision fixed attenuators achieves ultra-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 wideband features make these models ideal solutions for systems requiring precise attenuation across very wide frequency range.

KEY FEATURES

Feature	Advantages
Ultra Wideband, DC to 26 GHz	Ideal for an exceptionally wide variety of applications.
Excellent VSWR, 1.05 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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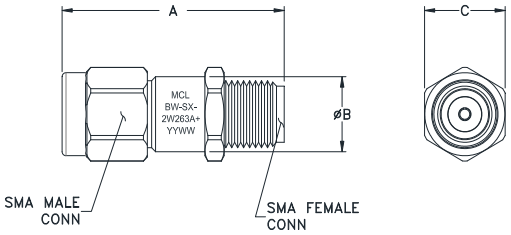
50Ω 2 W 6 dB DC to 26 GHz SMA Female to SMA Male

ABSOLUTE MAXIMUM RATINGS

Operating Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C[1]

1. With mated connectors.
Permanent damage may occur if any of these limits are exceeded.

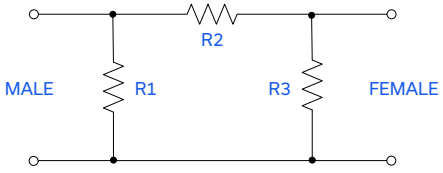
OUTLINE DRAWING



OUTLINE DIMENSIONS (Inches / mm)

dB Value	A	B	C	Wt Grams (Max.)
0-10	.86 (21.84)	.28 (7.1)	.312 (7.92)	6.0
15,20,30	1.02 (25.91)			

ELECTRICAL SCHEMATIC



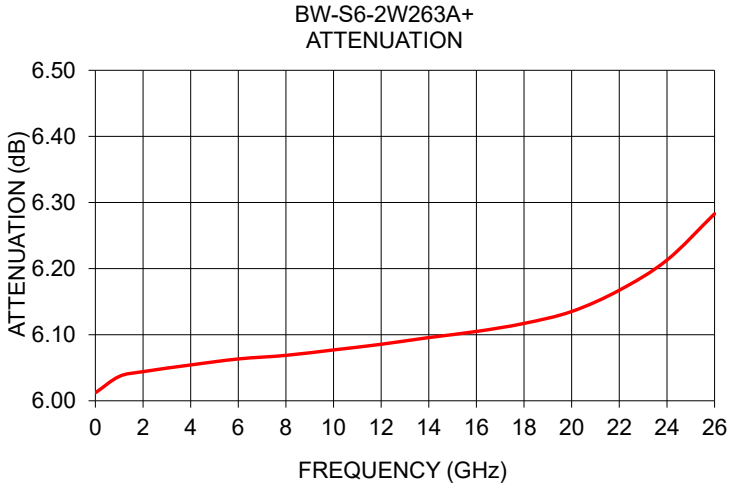
ELECTRICAL SPECIFICATIONS AT +25 °C

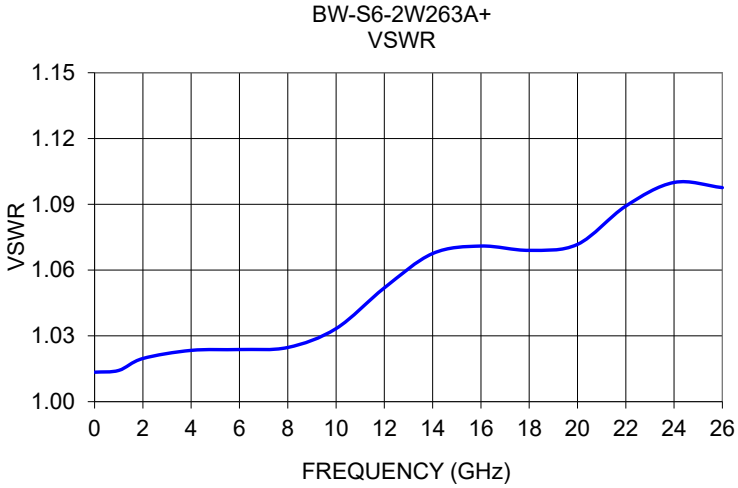
Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		26	GHz
Attenuation[2]	DC–26	5.25	6.1	6.75	dB
VSWR	DC–6	–	1.02	1.15	:1
	6–18	–	1.05	1.30	
	18–26	–	1.09	1.40	
Input Power[3]	DC–26	–	–	2	W

2. At +25 °C, accuracy includes frequency and power variations.
3. Max. Power at +25 °C ambient, derate linearly to 0.5 W at +125 °C. Peak power 250 W max. 5 µsec. pulse width, 10% duty cycle.

TYPICAL PERFORMANCE DATA

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.01	6.01	1.01
1.00	6.04	1.01
2.00	6.04	1.02
4.00	6.05	1.02
6.00	6.06	1.02
8.00	6.07	1.02
10.00	6.08	1.03
12.00	6.09	1.05
14.00	6.10	1.07
16.00	6.10	1.07
18.00	6.12	1.07
20.00	6.14	1.07
22.00	6.17	1.09
24.00	6.21	1.10
26.00	6.28	1.10





NOTES

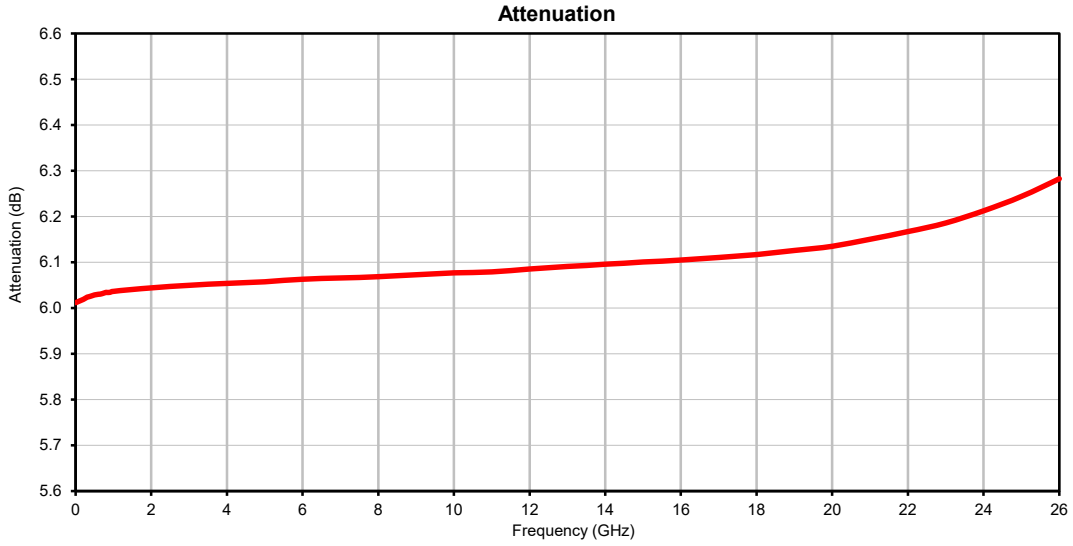
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B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document 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

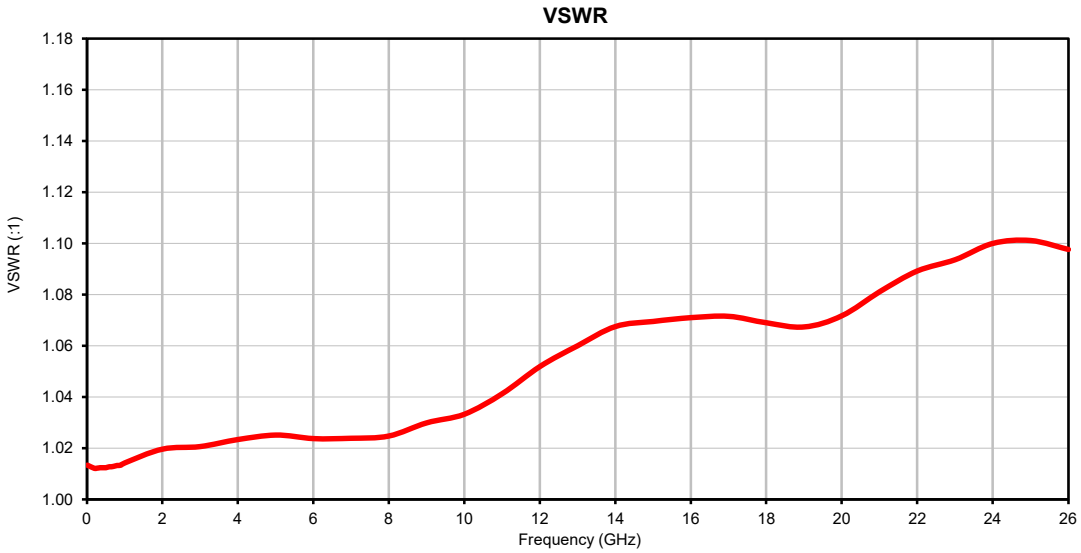
Fixed Attenuator BW-S6-2W263A+

Typical Performance Data

FREQUENCY (GHz)	ATTENUATION (dB)	VSWR (:1)
0.01	6.01	1.01
0.2	6.02	1.01
0.3	6.02	1.01
0.4	6.03	1.01
0.5	6.03	1.01
0.6	6.03	1.01
0.7	6.03	1.01
0.8	6.03	1.01
0.9	6.03	1.01
1.0	6.04	1.01
2.0	6.04	1.02
3.0	6.05	1.02
4.0	6.05	1.02
5.0	6.06	1.03
6.0	6.06	1.02
7.0	6.07	1.02
8.0	6.07	1.02
9.0	6.07	1.03
10.0	6.08	1.03
11.0	6.08	1.04
12.0	6.09	1.05
13.0	6.09	1.06
14.0	6.10	1.07
15.0	6.10	1.07
16.0	6.10	1.07
17.0	6.11	1.07
18.0	6.12	1.07
19.0	6.13	1.07
20.0	6.14	1.07
21.0	6.15	1.08
22.0	6.17	1.09
23.0	6.19	1.09
24.0	6.21	1.10
25.0	6.24	1.10
26.0	6.28	1.10

Typical Performance Curves

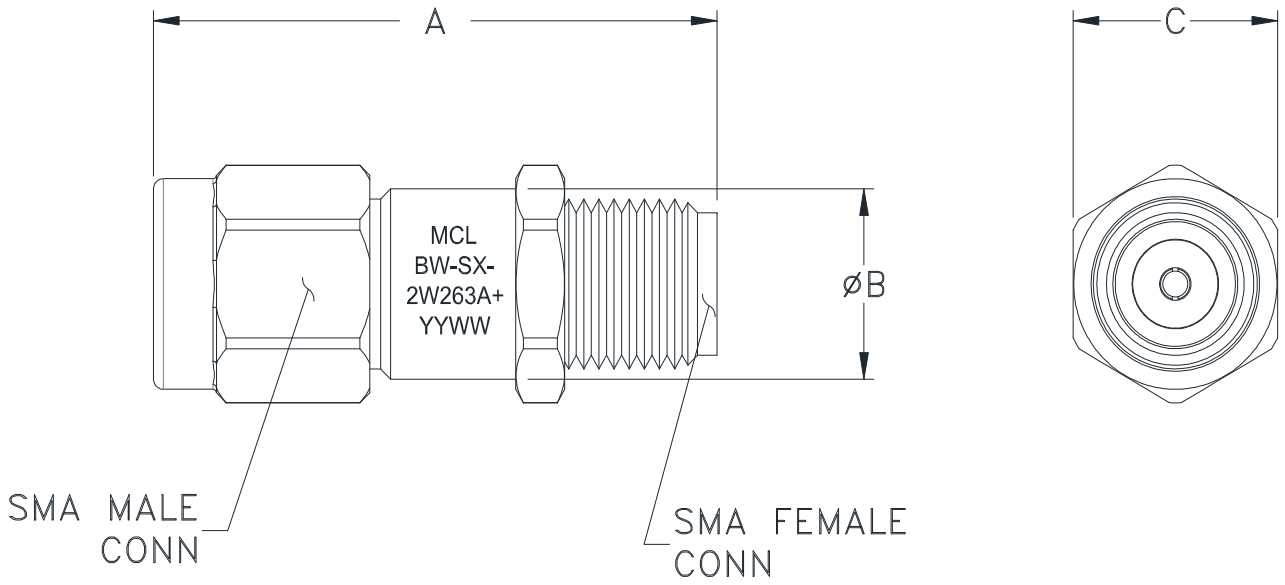




Case Style FF

Outline Dimensions

FF3336



dB VALUE	A	B	C	WT GRAMS (MAX)
0-10	.86 (21.84)	.28 (7.1)	.312 (7.92)	6.0
15,20,30	1.02 (25.91)			

Dimensions are in inches (mm). Tolerances: 2Pl ± .03; 3Pl. ± .015

Notes:

1. Case material: Stainless steel.
2. Case finish: Passivated.

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Mini-Circuits

Environmental Specifications **ENV28T18**

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to +100 °C	Individual Model Data Sheet
Storage Temperature	-55° to +100 °C	Individual Model Data Sheet
Burn-in	16Hrs Ambient Environment	
Thermal Shock	-55°C to +100°C, 100 cycles, 15 mins dwell at extreme temperatures	MIL-STD-202, Method 107
Vibration	20g peak, 10-2000 Hz 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	50g, 11ms half-sine, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition A
Drop Test	1.0m drops onto concrete of packed box in 6 orientations	

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