Coaxial

Precision Fixed Attenuator

BW-N3W5+

50Ω 5W 3dB DC to 18000 MHz

Generic photo used for illustration purposes only

CASE STYLE: DC736

Connectors	Model
N-Female N-Male	BW-N3W5+

Maximum Ratings

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

**With mated connectors. Unmated, 85°C max.

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

Features

- DC to 18000 MHz
- precise attenuation
- excellent VSWR, 1.20 typ
- stainless steel N male and female connectors

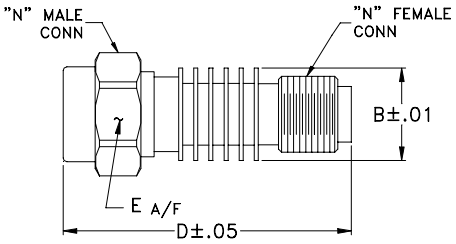
Applications

- matching
- instrumentation
- test set-ups

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch / mm)

B	D	E	wt
.61	1.90	.812	grams
15.49	48.26	20.62	49.7

Electrical Specifications

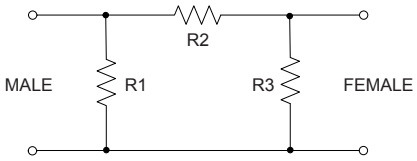
FREQ. RANGE (MHz)	ATTENUATION[1] (dB)		VSWR[2] (:1)			MAX. INPUT POWER[3] (W)
			DC-4 GHz	4-8 GHz	8-12.4 GHz	
f_L-f_U	Nom.	ACCURACY	Max.	Max.	Max.	
DC-18000	3	±0.40	1.20	1.25	1.30	5

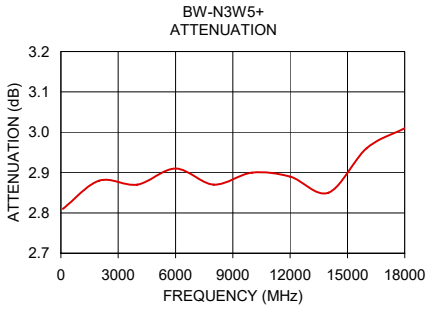
1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/dB/°C typ.
2. VSWR from 12.4 to 18 GHz, 1.6:1 typ.
3. Average power at 25°C ambient, derate linearly to 2W at 100°C. Peak Power 125W max. 5µsec. pulse width, 100 Hz PRF.

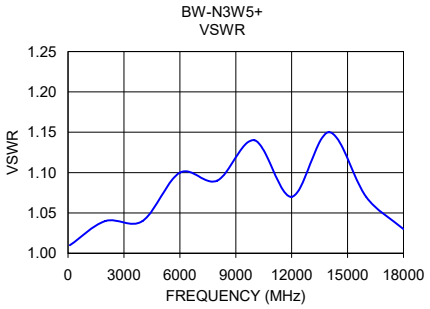
Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
100	2.81	1.01
2000	2.88	1.04
4000	2.87	1.04
6000	2.91	1.10
8000	2.87	1.09
10000	2.90	1.14
12000	2.89	1.07
14000	2.85	1.15
16000	2.96	1.07
18000	3.01	1.03

Electrical Schematic







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/MCLStore/terms.jsp

Fixed Attenuator BW-N3W5+

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	RETURN LOSS (dB)
100.00	2.81	46.06
2000.00	2.88	34.15
4000.00	2.87	34.15
6000.00	2.91	26.44
8000.00	2.87	27.32
10000.00	2.90	23.69
12000.00	2.89	29.42
14000.00	2.85	23.13
16000.00	2.96	29.42
18000.00	3.01	36.61

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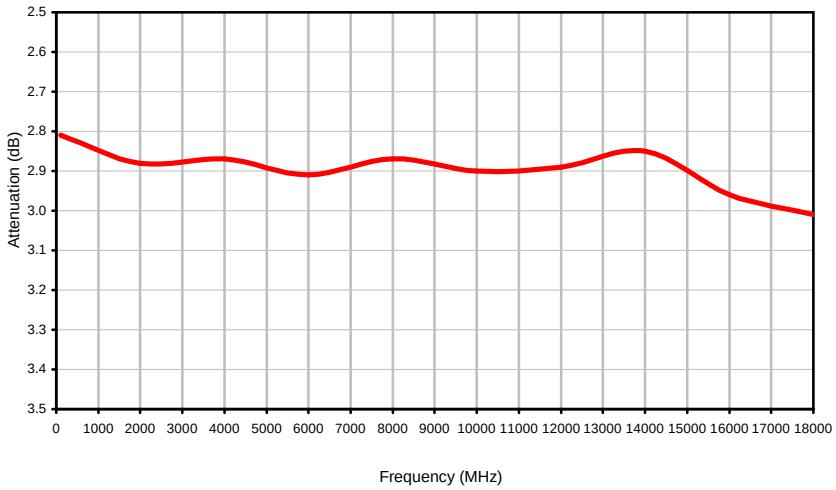
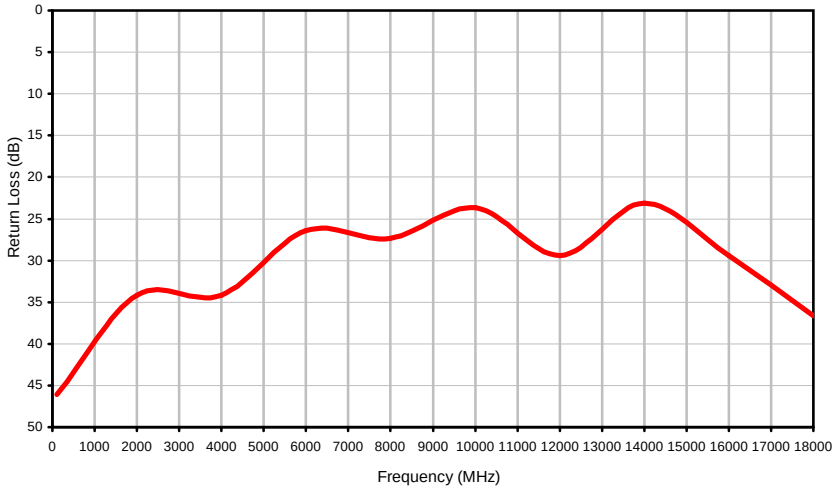
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see minicircuits.com

Typical Performance Curves

Attenuation



Return Loss



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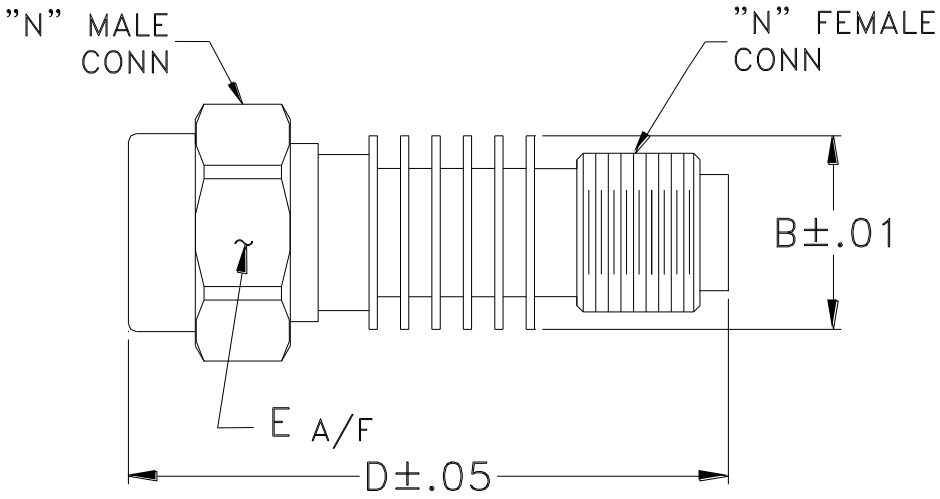
Case Style DC

Outline Dimensions

DC736



CASE#	A	B	C	D	E	WT. GRAMS
DC736	-- --	.61 (15.49)	-- --	1.90 (48.26)	.812 (20.62)	49.7

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

Notes:

1. Case material: Aluminum alloy.
2. Case finish: Black anodize.

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Environmental Specifications ENV28

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 Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I

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