# Coaxial **Precision Fixed Attenuator**

#### DC to 18000 MHz **50**Ω **5W** 8 dB

#### **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

#### **Outline Drawing** "N" FEMALE "N" MALE CONN соли B±.01 7 - E a/f D±.05

#### Outline Dimensions (inch)

wt	Е	D	В
grams	.812	1.90	.61
49.7	20.62	48.26	15.49

#### **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





Generic photo used for illustration purposes only CASE STYLE: DC736 Connectors Model N-Female N-Male BW-N8W5+

+RoHS Compliant

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

#### **Electrical Specifications**

FREQ. RANGE (MHz)		(dB)	DC-4 GHz Max	VSWR <sup>2</sup> (:1) 4-8 GHz Max.	8-12.4 GHz Max.	MAX. INPUT POWER <sup>3</sup> (W)
DC-18000	8	±0.60	1.20	1.25	1.30	5

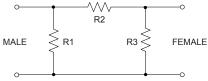
1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/dB/°C typ. 2. VSWR from 12.4 to 18 GHz, 1.6:1 typ.

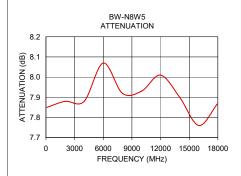
3. Average power at 25°C ambient, derate linearly to 2W at 100°C. Peak Power 125W max. 5µsec. pulse width, 100 Hz PRF.

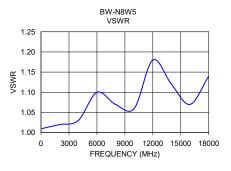
#### **Typical Performance Data**

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
100	7.85	1.01
2000	7.88	1.02
4000	7.88	1.03
6000	8.07	1.10
8000	7.92	1.07
10000	7.93	1.06
12000	8.01	1.18
14000	7.90	1.12
16000	7.76	1.07
18000	7.87	1.14









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## **Fixed Attenuator**

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	RETURN LOSS (dB)
100.00	7.85	46.06
2000.00	7.88	40.09
4000.00	7.88	36.61
6000.00	8.07	26.44
8000.00	7.92	29.42
10000.00	7.93	30.71
12000.00	8.01	21.66
14000.00	7.90	24.94
16000.00	7.76	29.42
18000.00	7.87	23.69

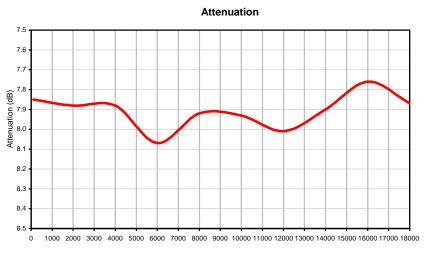


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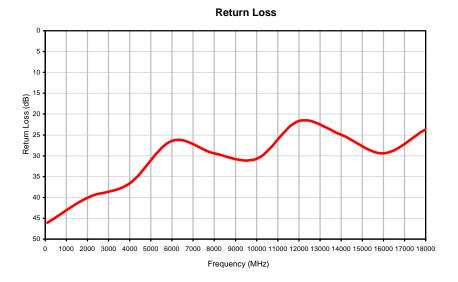
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED O RoHS compliant P.O. Box 350166, Brooklyn, New York 1125-0003 (718) 934-4500 Fax (718) 932-4661 minicipality.com PeterPending The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see

## **Fixed Attenuator**

## Typical Performance Curves



Frequency (MHz)





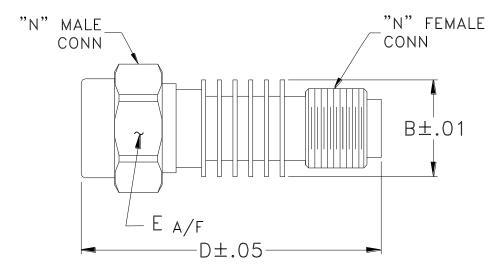
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# Case Style

## **Outline Dimensions**

DC736



CASE#	А	В	С	D	Е	WT. GRAMS
DC736		.61		1.90	.812	49.7
DC750		(15.49)		(48.26)	(20.62)	47.7

Dimensions are in inches (mm). Tolerances: 2 Pl. <u>+</u>.03; 3 Pl. <u>+</u>.015

#### Notes:

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





P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com



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**RF/IF MICROWAVE COMPONENTS** 

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## **Mini-Circuits** 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

ENV28 Rev: B 09/26/13 M143494 File: ENV28.pdf

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