

Coaxial

N-Type Fixed Attenuator

50Ω 100W 40dB DC to 4000 MHz

BW-40N100W+

Maximum Ratings

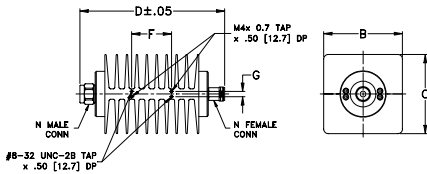
Operating Temperature -55°C to 100°C

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



Outline Dimensions (inch/mm)

B	C	D	E	F	G	wt.
3.46	3.46	6.36	--	1.75	.23	grams
87.88	87.88	161.54	--	44.45	5.84	1100.0

Features

- DC to 4000 MHz
- excellent VSWR, 1.20:1
- N-Male and N-Female connectors
- bi-directional

Applications

- matching
- instrumentation
- test set-ups



CASE STYLE: GH986

Connectors Model
N-Male-N-Fem BW-40N100W+

+RoHS Compliant

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

Electrical Specifications

FREQ. RANGE ¹ (MHz)	ATTENUATION (dB)		VSWR (:1)			POWER ² (W)
	Nom.	ACCURACY	DC-0.5 GHz	0.5-2 GHz	2-4 GHz	
f_L - f_U			Max.	Max.	Max.	
DC-4000	40	±1.6	1.15	1.35	1.4	100

Temperature coefficient for attenuation .0004 dB/dB/°C typ.

1. Useable to 5 GHz

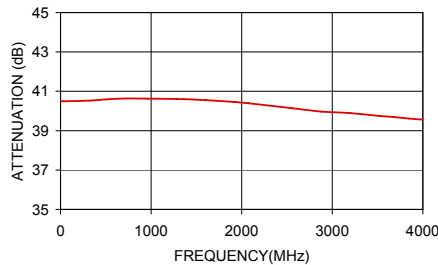
2. Average power at 25°C ambient, derate linearly to 50W at 100°C, bi-directional

Peak power 1kW max., 5µ sec pulse width, 100 Hz PRF

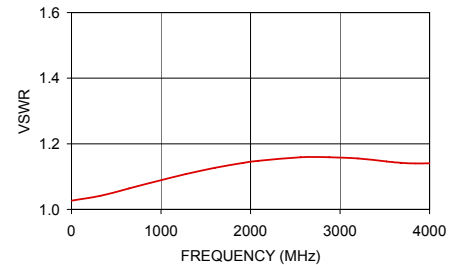
Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
1.00	40.49	1.03
320.92	40.53	1.04
640.84	40.63	1.06
960.76	40.63	1.09
1280.68	40.61	1.11
1600.60	40.55	1.13
1920.52	40.46	1.14
2080.48	40.39	1.15
2560.36	40.14	1.16
2880.28	39.97	1.16
3200.20	39.89	1.16
3520.12	39.75	1.15
3680.08	39.69	1.14
3840.04	39.62	1.14
4000.00	39.56	1.14

BW-40N100W+
ATTENUATION



BW-40N100W+
VSWR



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/WCLStore/terms.jsp



Fixed Attenuator

BW-40N100W+

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	RETURN LOSS (dB)
1.00	40.49	37.62
320.92	40.53	33.88
640.84	40.63	30.21
960.76	40.63	27.68
1280.68	40.61	25.82
1600.60	40.55	24.48
1920.52	40.46	23.56
2080.48	40.39	23.25
2560.36	40.14	22.66
2880.28	39.97	22.65
3200.20	39.89	22.85
3520.12	39.75	23.33
3680.08	39.69	23.58
3840.04	39.62	23.69
4000.00	39.56	23.66

REV. X1
BW-40N100W+
061106
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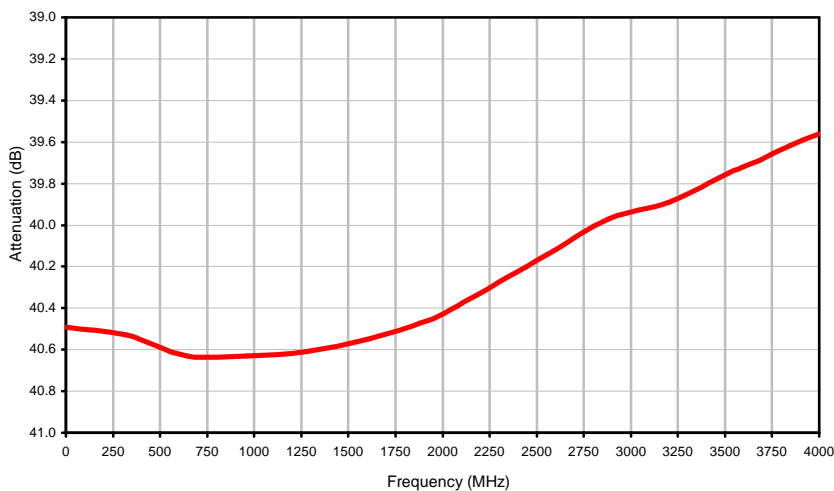


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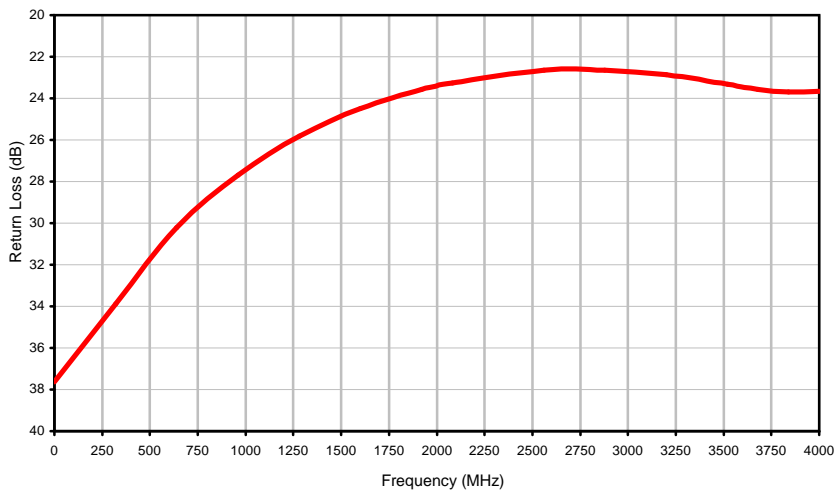


Typical Performance Curves

Attenuation



Return Loss



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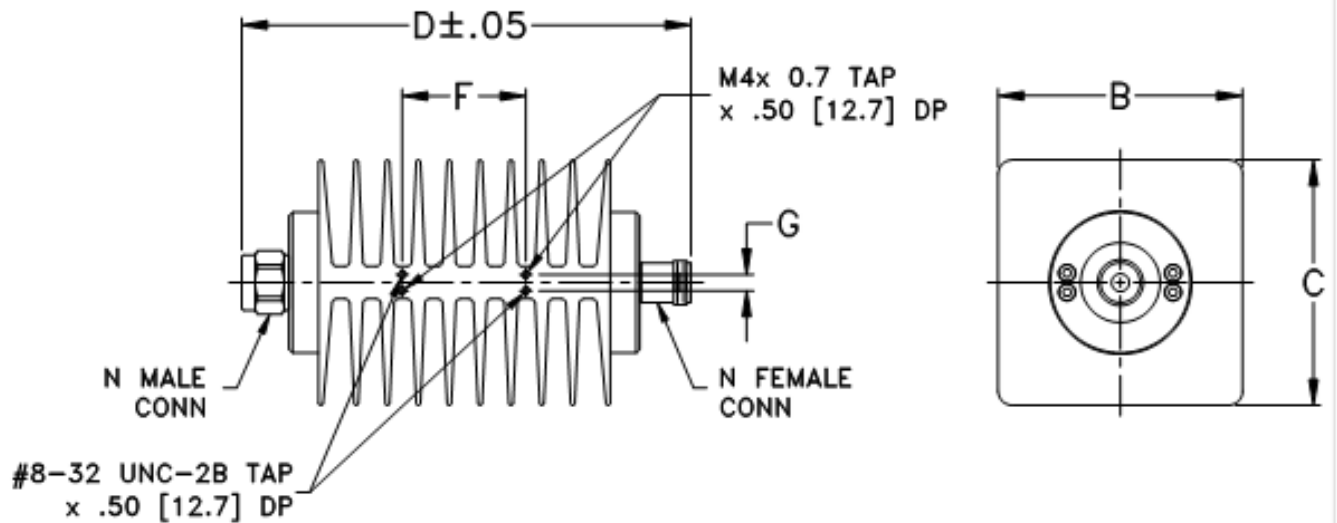


Case Style

GH

Outline Dimensions

GH986



CASE #.	A	B	C	D	E	F	G	H	J	WT. GRAM
GH986	--	3.46 (87.88)	3.46 (87.88)	6.36 (161.54)	--	1.75 (44.45)	.23 (5.84)	--	--	1100

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

Notes:

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

Mini-Circuits®

INTERNET <http://www.minicircuits.com>

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Mini-Circuits ISO 9001 & ISO 14001 Certified

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