

Type-N/BNC Adaptenuator

50Ω 0.5W 3dB DC to 2000 MHz

NM-BF-3



CASE STYLE: DJ866

Connectors	Model
Conn1 N-Male	Conn2 BNC-Female
Model NM-BF-3	

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 150°C

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

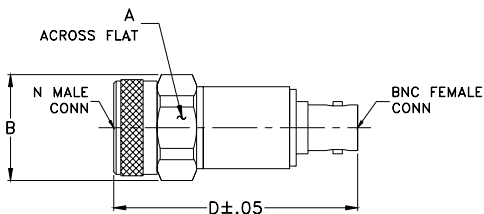
Features

- improved interface matching
- wideband, DC to 2000 MHz, useable to 4000 MHz
- excellent VSWR, 1.1:1 typ.
- excellent flatness, ± 0.1 dB typ.
- rugged unibody construction

Applications

- instrumentation
- provides attenuation and connector type change
- minimizes hardware

Outline Drawing



Outline Dimensions (inch/mm)

A	B	D	wt
inch			
.812	.88	2.03	grams
mm			
20.62	18.29	51.56	57.0

Electrical Specifications

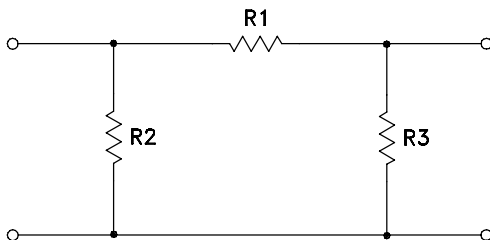
FREQ. (MHz)	ATTENUATION (dB)						VSWR (:1)						MAX. INPUT POWER (W)	
	Flatness*						DC-500 MHz		DC-1000 MHz		DC-2000 MHz			
	Nom.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.		Max.
DC-2000	3 \pm 0.3	0.05	0.15	0.10	0.20	0.15	0.25	1.1	1.2	1.1	1.2	1.2	1.25	0.5

*Flatness defined as peak to peak attenuation over band divided by 2.

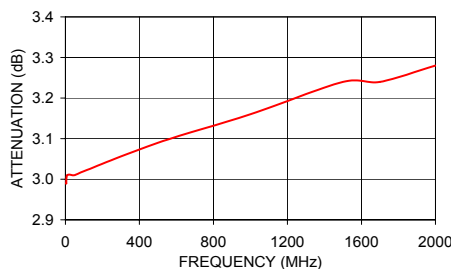
Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	VSWR (:1)	
		BNC-Female	N-Male
1.00	2.99	1.00	1.00
5.00	2.99	1.00	1.00
10.00	3.01	1.00	1.00
50.00	3.01	1.01	1.01
100.00	3.02	1.02	1.02
500.00	3.09	1.06	1.07
1000.00	3.16	1.10	1.12
1500.00	3.24	1.11	1.12
1700.00	3.24	1.10	1.10
2000.00	3.28	1.07	1.06

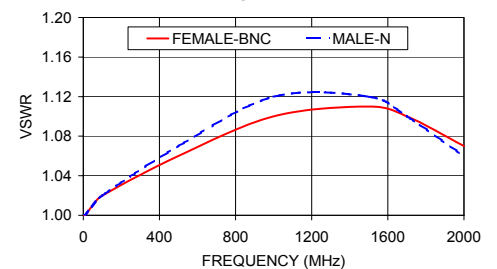
Electrical Schematic



NM-BF-3
ATTENUATION



NM-BF-3
VSWR



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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



Type-N/BNC Adaptenuator

NM-BF-3

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	BNC-FEMALE RETURN LOSS (dB)	N-MALE RETURN LOSS (dB)
1	2.99	46.06	46.06
5	2.99	46.06	46.06
10	3.01	46.06	46.06
50	3.01	46.06	46.06
100	3.02	40.09	40.09
500	3.09	30.71	29.42
1000	3.16	26.44	24.94
1500	3.24	25.66	24.94
1700	3.24	26.44	26.44
2000	3.28	29.42	30.71

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061113
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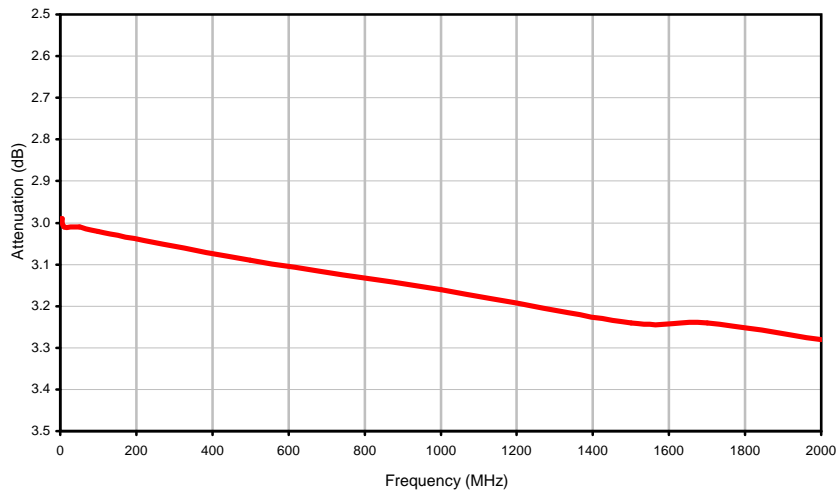


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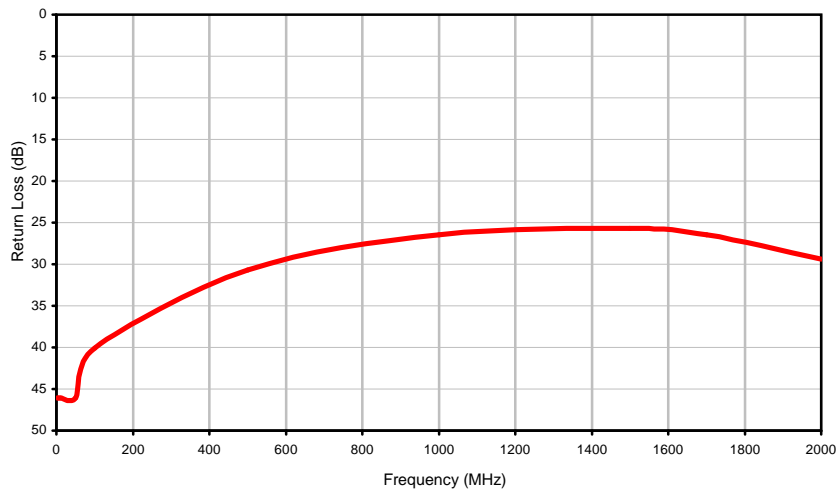


Typical Performance Curves

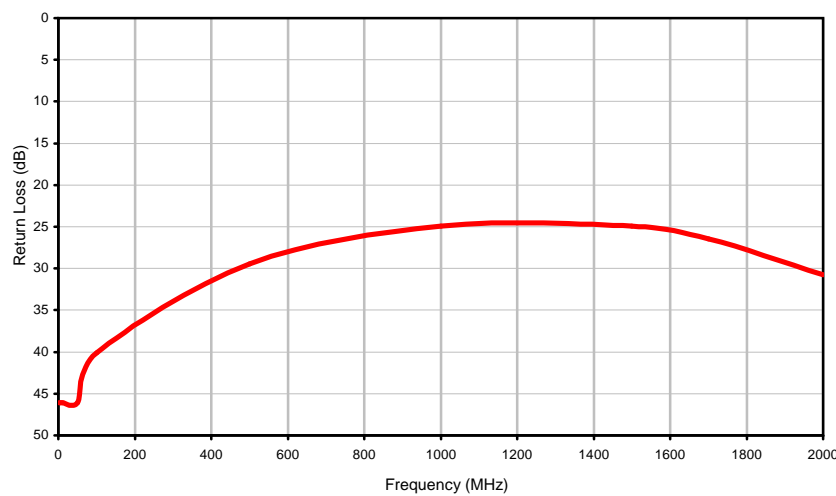
Attenuation



BNC-Female Return Loss



N-Male Return Loss



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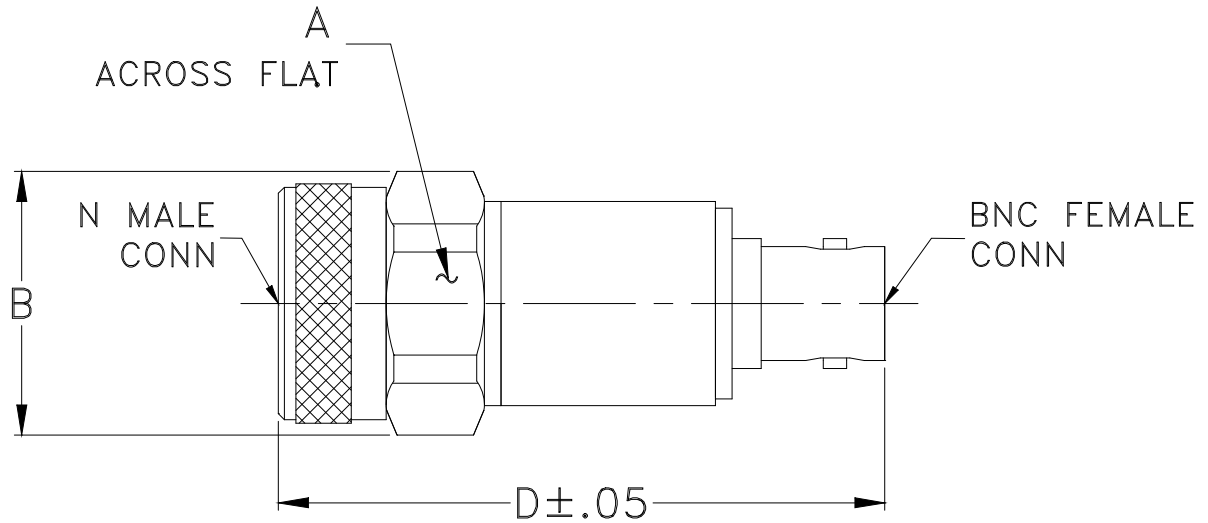
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Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAM
DJ866	.812 (20.62)	.88 (22.35)	-- --	2.03 (51.56)	-- --	57.0

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

Notes:

1. Case material: Brass.
2. Finish: Nickel plate.



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