NON-CATALOG

SMA/BNC

Adaptenuator

SF-BM-6

50Ω 0.5W 6dB DC to 2000 MHz

CASE STYLE: DJ870

Connectors		Model
Conn1	**Conn2**	
SMA-Female	**BNC-Male**	SF-BM-6

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.

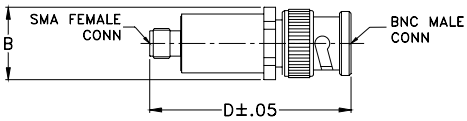
Features

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

Applications

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

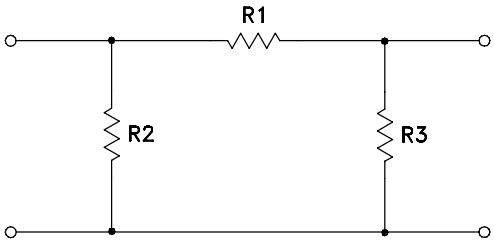
Outline Drawing



Outline Dimensions (inch / mm)

B	D	wt
.61	1.69	grams
15.49	42.93	24.0

Electrical Schematic



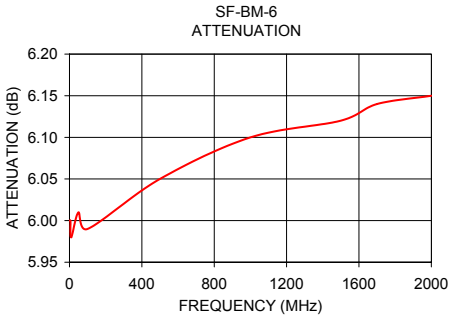
Electrical Specifications

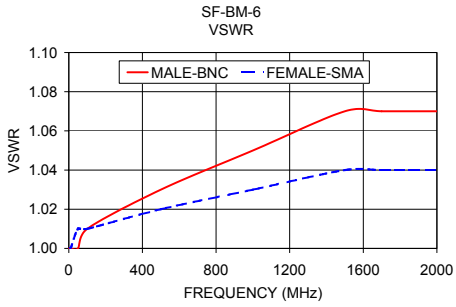
FREQ. (MHz)	ATTENUATION (dB) Flatness*							VSWR (:1)						MAX. INPUT POWER (W)
		DC-500 MHz		DC-1000 MHz		DC-2000 MHz		DC-500 MHz		DC-1000 MHz		DC-2000 MHz		
f_L-f_U	Nom.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	
DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25	1.1	1.2	1.1	1.2	1.2	1.25	0.5

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

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	VSWR (:1)	
		BNC-Male	SMA-Female
1.00	6.00	1.00	1.00
5.00	6.00	1.00	1.00
10.00	5.98	1.00	1.00
50.00	6.01	1.00	1.01
100.00	5.99	1.01	1.01
500.00	6.05	1.03	1.02
1000.00	6.10	1.05	1.03
1500.00	6.12	1.07	1.04
1700.00	6.14	1.07	1.04
2000.00	6.15	1.07	1.04





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

REV. E
M158359
EE-9890
SF-BM-6
URJ/TD/CP/AM
160110

SMA/BNC Adaptenuator SF-BM-6

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	BNC-MALE RETURN LOSS (dB)	SMA-FEMALE RETURN LOSS (dB)
1	6.00	46.06	46.06
5	6.00	46.06	46.06
10	5.98	46.06	46.06
50	6.01	46.06	46.06
100	5.99	46.06	46.06
500	6.05	36.61	40.09
1000	6.10	32.26	36.61
1500	6.12	29.42	34.15
1700	6.14	29.42	34.15
2000	6.15	29.42	34.15

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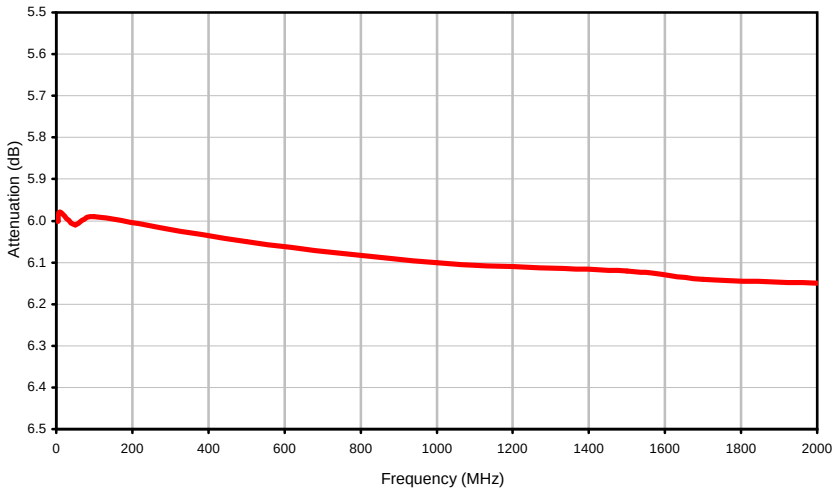
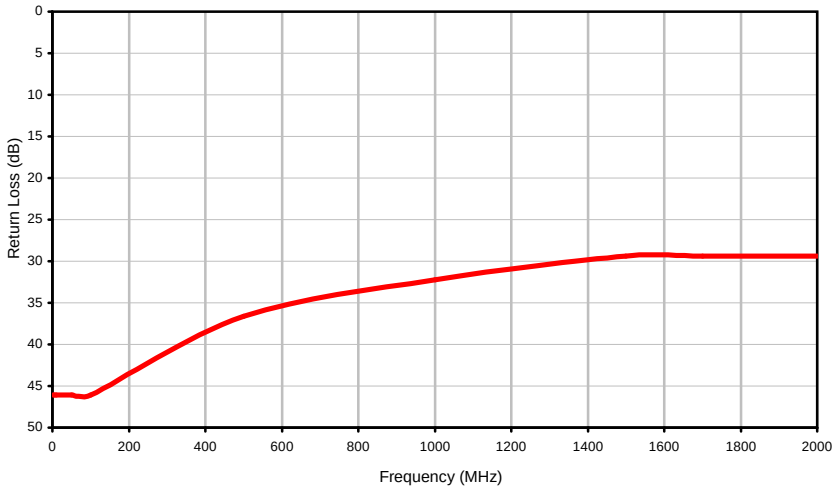
SMA/BNC Adaptenuator SF-BM-6

Typical Performance Curves

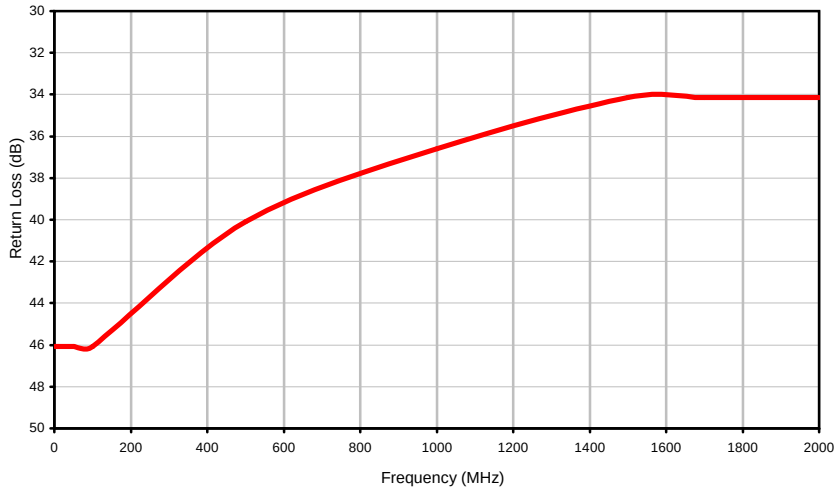
Attenuation



BNC-Male Return Loss



SMA-Female Return Loss



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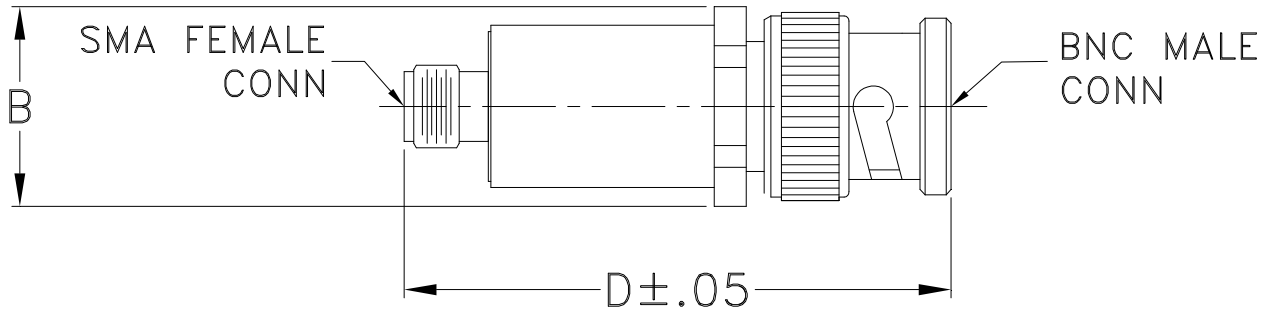
Case Style DJ

DJ870

Outline Dimensions



CASE#	A	B	C	D	E	WT. GRAM
DJ870	-- --	.61 (15.49)	-- --	1.69 (42.93)	-- --	24.0

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

Notes:

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

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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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