

Coaxial Precision Fixed Attenuator

50Ω 1W 9dB DC to 2000 MHz

HAT-9+
HAT-9



CASE STYLE: FF747

Connectors	Model	Price	Qty.
BNC Male-BNC Female	HAT-9(+)	9.95 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Maximum Ratings

Operating Temperature	-45°C to 100°C
Storage Temperature	-55°C to 100°C

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

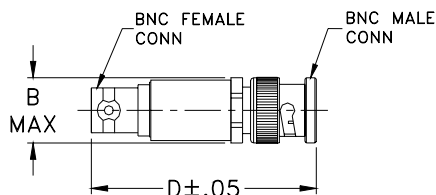
Features

- excellent VSWR, 1.05:1 typ.
- excellent flatness, 0.15 dB typ. to 2000 MHz
- usable to 4000 MHz

Applications

- PCS
- instrumentation
- cellular

Outline Drawing



Outline Dimensions (inch/mm)

B	D	wt
.62	1.94	grams
15.75	49.28	30.0

Electrical Specifications

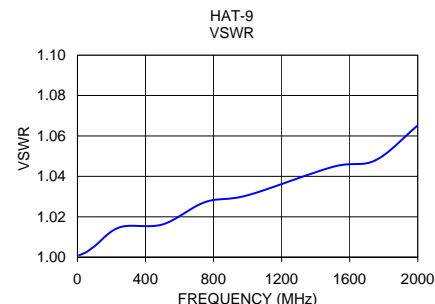
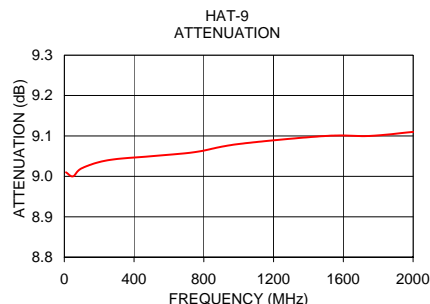
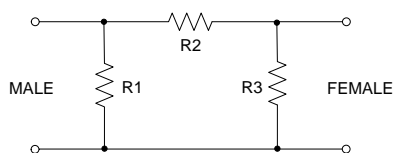
FREQ. RANGE (MHz)	ATTENUATION (dB)					VSWR (:1)			MAX. INPUT POWER (W)
	Flatness*					DC-0.5 GHz	DC-1 GHz	DC-2 GHz	
	DC-0.5 GHz	DC-1 GHz	DC-2 GHz	Total Band Typ.	DC-0.5 GHz				
f_L - f_U	Nom.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	
DC-2000	9±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0

* Flatness = variation over band divided by 2.

Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
10.00	9.01	1.00
50.00	9.00	1.00
100.00	9.02	1.01
250.00	9.04	1.01
500.00	9.05	1.02
750.00	9.06	1.03
1000.00	9.08	1.03
1500.00	9.10	1.04
1750.00	9.10	1.05
2000.00	9.11	1.07

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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
M98898
EDR-5087/1-15
HAT-9
RVN/LC/CP/AM
090813