# **Fixed Attenuator**

**HAT-12+** 

## $50\Omega$

1W

12dB

DC to 2000 MHz

## **Maximum Ratings**

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

Permanent damage may occur if any of these limits are exceeded

### **Features**

- excellent VSWR, 1.05:1 typ.
- excellent flatness, 0.10 dB typ. to 2000 MHz
- usable to 4000 MHz

**Applications** 

instrumentation

• PCS

• cellular

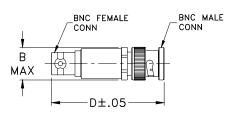
CASE STYLE: FF747

Connectors Model BNC Male-BNC Female HAT-12+

### +RoHS Compliant

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

## **Outline Drawing**



# Outline Dimensions (inch )

В D wt .62 1.94 grams 15.75 49.28 30.0

## **Electrical Specifications**

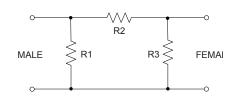
FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness*			VSWR (:1)			MAX. INPUT POWER		
		DC-0.5 GHz	DC-1 GHz	DC-2 GHz	Total Band	DC-0.5 GHz	DC-1 GHz	DC-2 GHz	(W)
f <sub>L</sub> -f <sub>U</sub>	Nom.	Тур.	Тур.	Тур.	Тур.	Тур.	Тур.	Тур.	
DC-2000	12±0.2	0.05	0.10	0.10	0.25	1.05	1.10	1.15	1.0

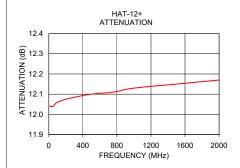
<sup>\*</sup> Flatness = variation over band divided by 2.

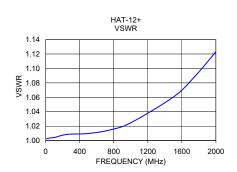
## **Typical Performance Data**

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
10.00	12.04	1.00
50.00	12.04	1.00
100.00	12.06	1.00
250.00	12.08	1.01
500.00	12.10	1.01
750.00	12.11	1.01
1000.00	12.13	1.02
1500.00	12.15	1.06
1750.00	12.16	1.09
2000.00	12.17	1.12

**Electrical Schematic** 







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-Circuits tapplicable 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