

# Fixed Attenuator

## HAT-20-75

75Ω 0.5W 20dB DC to 2000 MHz



CASE STYLE: FF747

Connectors Model  
**BNC Male-BNC Female** HAT-20-75

### 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.

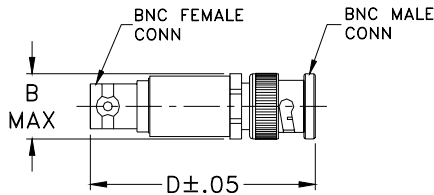
### Features

- excellent VSWR, 1.04:1 typ.
- excellent flatness, 0.05 dB typ. to 2000 MHz
- usable to 4000 MHz
- rugged unibody construction

### Applications

- cable tv
- instrumentation
- DS3 signal

### Outline Drawing



### Outline Dimensions (inch/mm)

B	D	wt
.62	1.94	grams
15.75	49.28	30.0

### Electrical Specifications

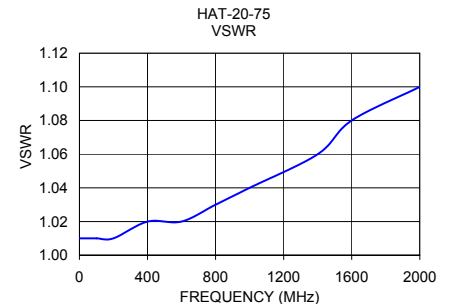
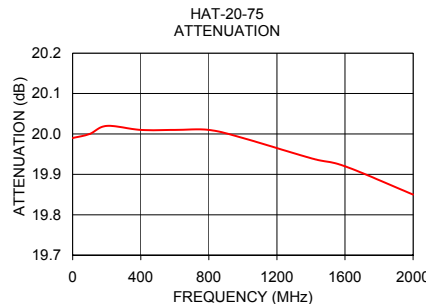
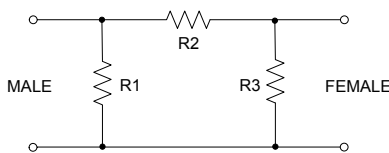
FREQ. RANGE (MHz)	ATTENUATION (dB)						VSWR (:1)						MAX. INPUT POWER† (W)	
	Flatness*													
	DC-0.5 GHz		DC-1 GHz		DC-2 GHz		DC-0.5 GHz		DC-1 GHz		DC-2 GHz			
$f_L - f_U$	Nom.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	
DC-2000	20±0.2	0.05	0.15	0.05	0.15	0.05	0.20	1.03	1.2	1.04	1.2	1.1	1.3	0.5

\* Flatness = variation over band divided by 2.  
 † 0.5 Watt at 70°C ambient, derate linearly .015W/°C above 70°C

### Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
1.00	19.99	1.01
100.00	20.00	1.01
200.00	20.02	1.01
400.00	20.01	1.02
600.00	20.01	1.02
800.00	20.01	1.03
1000.00	19.99	1.04
1400.00	19.94	1.06
1600.00	19.92	1.08
2000.00	19.85	1.10

### 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-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](http://www.minicircuits.com/MCLStore/terms.jsp)