

# Coaxial Fixed Attenuator

50Ω 1W 2dB DC to 2000 MHz

## HAT-2+



CASE STYLE: FF747

Connectors Model  
BNC Male-BNC Female HAT-2+

**+RoHS Compliant**

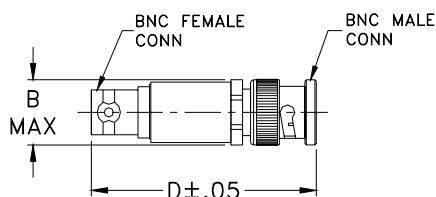
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### 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.

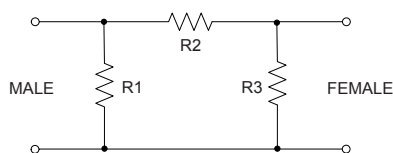
### Outline Drawing



### Outline Dimensions (inch/mm)

|       |       |       |
|-------|-------|-------|
| B     | D     | wt    |
| .62   | 1.94  | grams |
| 15.75 | 49.28 | 30.0  |

### Electrical Schematic



### Features

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

### Applications

- PCS
- instrumentation
- cellular

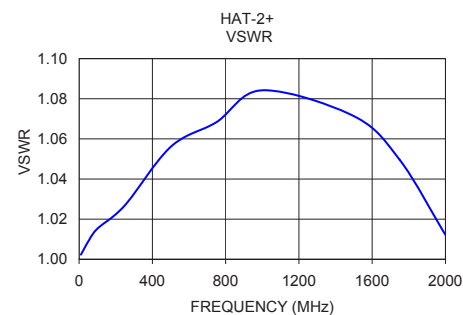
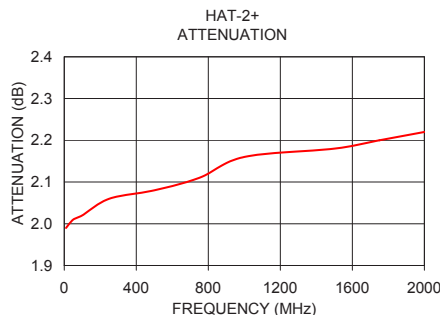
### Electrical Specifications

| 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. | Typ. |            |          |          |                      |
| $f_L$ - $f_U$     | Nom.             | Typ.     | Typ.     | Typ.            | Typ. | Typ.       | Typ.     | Typ.     |                      |
| DC-2000           | 2±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           | 1.99             | 1.00      |
| 50.00           | 2.01             | 1.01      |
| 100.00          | 2.02             | 1.02      |
| 250.00          | 2.06             | 1.03      |
| 500.00          | 2.08             | 1.06      |
| 750.00          | 2.11             | 1.07      |
| 1000.00         | 2.16             | 1.08      |
| 1500.00         | 2.18             | 1.07      |
| 1750.00         | 2.20             | 1.05      |
| 2000.00         | 2.22             | 1.01      |



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

