

SMA/BNC

# Adaptenuator

## SM-BF-3

50Ω 0.5W 3dB DC to 2000 MHz



### 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

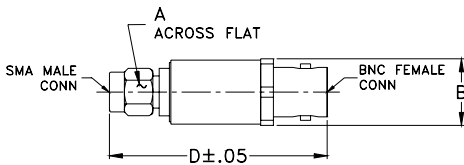
CASE STYLE: DJ871

| Connectors        | Model               | Price   | Qty.               |
|-------------------|---------------------|---------|--------------------|
| Conn1<br>SMA-Male | Conn2<br>BNC-Female | SM-BF-3 | \$19.95 ea. (1-24) |

### Applications

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

### Outline Drawing



### Electrical Specifications

| FREQ.<br>(MHz) | ATTENUATION (dB) |      |                |      |                |      | VSWR (:1)     |      |                |      |                |      | MAX.<br>INPUT<br>POWER<br>(W) |     |
|----------------|------------------|------|----------------|------|----------------|------|---------------|------|----------------|------|----------------|------|-------------------------------|-----|
|                | Flatness*        |      |                |      |                |      |               |      |                |      |                |      |                               |     |
|                | DC-500<br>MHz    |      | DC-1000<br>MHz |      | DC-2000<br>MHz |      | DC-500<br>MHz |      | DC-1000<br>MHz |      | DC-2000<br>MHz |      |                               |     |
| $f_L-f_U$      | Nom.             | Typ. | Max.           | Typ. | Max.           | Typ. | Max.          | Typ. | Max.           | Typ. | Max.           | Typ. | Max.                          |     |
| DC-2000        | 3±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.

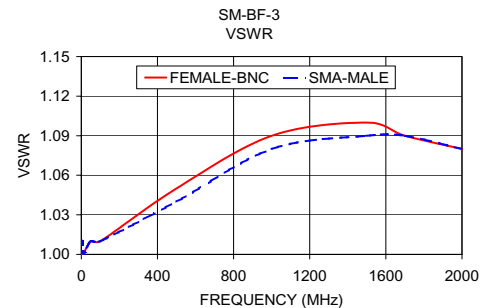
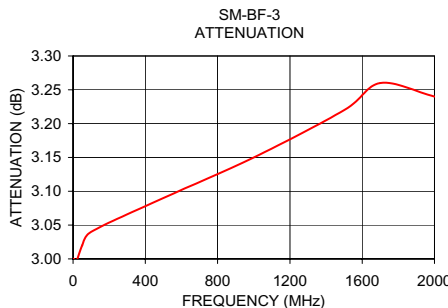
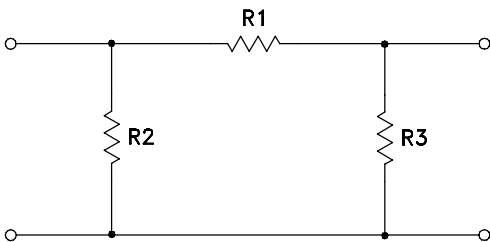
### Typical Performance Data

| FREQUENCY<br>(MHz) | ATTENUATION<br>(dB) | VSWR<br>(:1) |          |
|--------------------|---------------------|--------------|----------|
|                    |                     | BNC-Female   | SMA-Male |
| 1.00               | 3.00                | 1.00         | 1.01     |
| 5.00               | 3.00                | 1.00         | 1.01     |
| 10.00              | 2.99                | 1.00         | 1.00     |
| 50.00              | 3.02                | 1.01         | 1.01     |
| 100.00             | 3.04                | 1.01         | 1.01     |
| 500.00             | 3.09                | 1.05         | 1.04     |
| 1000.00            | 3.15                | 1.09         | 1.08     |
| 1500.00            | 3.22                | 1.10         | 1.09     |
| 1700.00            | 3.26                | 1.09         | 1.09     |
| 2000.00            | 3.24                | 1.08         | 1.08     |

### Outline Dimensions (inch/mm)

| A    | B     | D     | wt    |
|------|-------|-------|-------|
| .312 | .55   | 1.68  | grams |
| 7.92 | 13.97 | 42.67 | 18.8  |

### Electrical Schematic



### 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.
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