

Coaxial

# SMA Fixed Attenuator

50Ω 1W 4dB DC to 6000 MHz

VAT-4+



CASE STYLE: FF704

| Connectors | Model  | Price       | Qty.  |
|------------|--------|-------------|-------|
| SMA        | VAT-4+ | \$11.95 ea. | (1-9) |

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

The +Suffix has been added in order to identify 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.

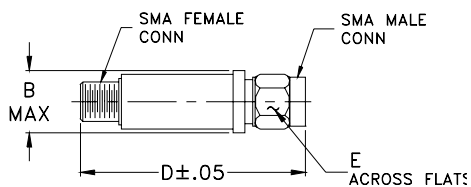
## Features

- wideband coverage, DC to 6000 MHz
- 1 watt rating
- rugged unibody construction
- off-the-shelf availability
- very low cost

## Applications

- impedance matching
- signal level adjustment

## Outline Drawing



## Outline Dimensions (inch/mm)

| B     | D     | E    | wt    |
|-------|-------|------|-------|
| .410  | 1.43  | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10.0  |

## Electrical Specifications

| FREQ. RANGE (MHz) | ATTENUATION * (dB) |         |         |          |      | VSWR (:1) |         |         |      |      | MAX. INPUT POWER (W) |     |
|-------------------|--------------------|---------|---------|----------|------|-----------|---------|---------|------|------|----------------------|-----|
|                   | Flatness **        |         |         |          |      |           |         |         |      |      |                      |     |
|                   | DC-3 GHz           | 3-5 GHz | 5-6 GHz | DC-6 GHz |      | DC-3 GHz  | 3-5 GHz | 5-6 GHz |      |      |                      |     |
| $f_L-f_U$         | Nom.               | Typ.    | Typ.    | Typ.     | Typ. | Typ.      | Max.    | Typ.    | Max. | Typ. |                      |     |
| DC-6000           | 4±0.3              | 0.20    | 0.15    | 0.20     | 0.55 | 1.05      | 1.20    | 1.15    | 1.45 | 1.45 |                      | 1.0 |

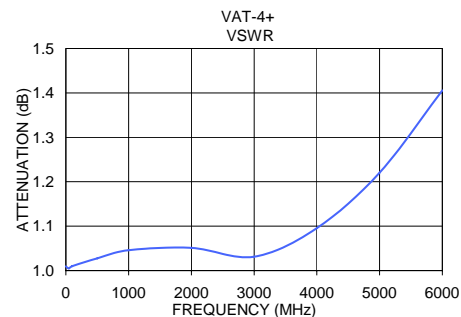
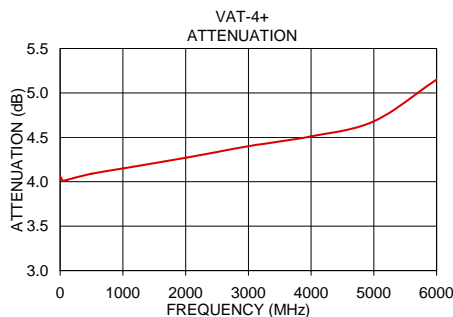
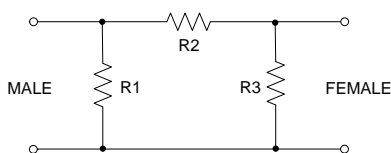
\* Attenuation varies by 0.3 dB max. over temperature.

\*\* Flatness= variation over band divided by 2.

## Typical Performance Data

| Frequency (MHz) | Attenuation (dB) | VSWR (:1) |
|-----------------|------------------|-----------|
| 0.03            | 4.06             | 1.01      |
| 50.00           | 4.01             | 1.00      |
| 100.00          | 4.02             | 1.01      |
| 500.00          | 4.09             | 1.03      |
| 1000.00         | 4.15             | 1.05      |
| 2000.00         | 4.27             | 1.05      |
| 3000.00         | 4.40             | 1.03      |
| 4000.00         | 4.51             | 1.10      |
| 5000.00         | 4.68             | 1.22      |
| 6000.00         | 5.15             | 1.41      |

## Electrical Schematic



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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

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