

# Precision Fixed Attenuator

## BW-S40W5+

50Ω 5W 40dB DC to 18000 MHz

### Maximum Ratings

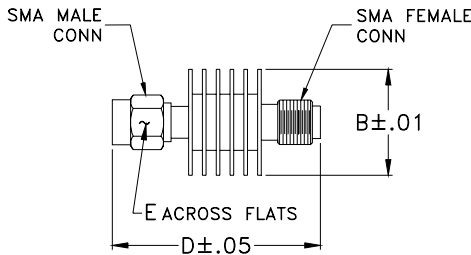
Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C\*\*

\*\*With mated connectors. Unmated, 85°C max.

Permanent damage may occur if any of these limits are exceeded.

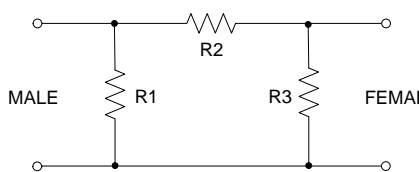
### Outline Drawing



### Outline Dimensions (inch/mm)

| B     | D     | E    | wt    |
|-------|-------|------|-------|
| .61   | 1.20  | .312 | grams |
| 15.49 | 30.48 | 7.92 | 9.1   |

### Electrical Schematic



### Features

- DC to 18000 MHz
- precise attenuation
- excellent VSWR, 1.20 typ.
- stainless steel SMA male and female connectors

### Applications

- matching
- instrumentation
- test set-ups



CASE STYLE: DC737

| Connectors          | Model     | Price     | Qty.   |
|---------------------|-----------|-----------|--------|
| SMA Female-SMA Male | BW-S40W5+ | 44.95 ea. | (1-49) |

+ 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.

### Electrical Specifications

| FREQ. RANGE (MHz) | ATTENUATION <sup>1</sup> (dB) |           | VSWR <sup>2</sup> (:1) |              |                 | MAX. INPUT POWER <sup>3</sup> (W) |
|-------------------|-------------------------------|-----------|------------------------|--------------|-----------------|-----------------------------------|
|                   | Nom.                          | ACCURACY  | DC-4 GHz Max.          | 4-8 GHz Max. | 8-12.4 GHz Max. |                                   |
| $f_L$ - $f_U$     |                               |           |                        |              |                 |                                   |
| DC-18000          | 40                            | -1.0,+1.5 | 1.20                   | 1.25         | 1.30            | 5                                 |

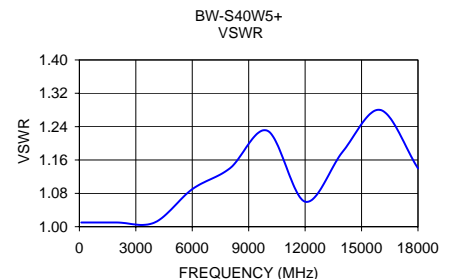
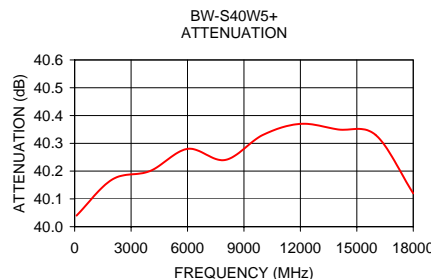
1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/dB/°C typ.

2. VSWR from 12.4 to 18 GHz, 1.6:1 typ.

3. Average power at 25°C ambient, derate linearly to 2W at 100°C. Peak Power 125W max. 5µsec pulse width, 100 Hz PRF.

### Typical Performance Data

| Frequency (MHz) | Attenuation (dB) | VSWR (:1) |
|-----------------|------------------|-----------|
| 100             | 40.04            | 1.01      |
| 2000            | 40.17            | 1.01      |
| 4000            | 40.20            | 1.01      |
| 6000            | 40.28            | 1.09      |
| 8000            | 40.24            | 1.14      |
| 10000           | 40.33            | 1.23      |
| 12000           | 40.37            | 1.06      |
| 14000           | 40.35            | 1.18      |
| 16000           | 40.33            | 1.28      |
| 18000           | 40.12            | 1.14      |



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

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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).