Precision Fixed Attenuator

DC to 18000 MHz 50Ω **2W** 9dB

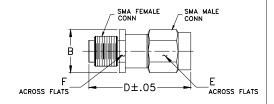
Maximum Ratings

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

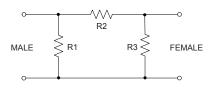
Outline Drawing



Outline Dimensions (inch)

| wt | F | Е | D | В |
|-------|------|------|-------|------|
| grams | .312 | .312 | .85 | .36 |
| 4.3 | 7.92 | 7.92 | 21.59 | 9.14 |

Electrical Schematic



Features

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

BW-S9W2+



CASE STYLE: FF658

Connectors Model SMA Female-SMA Male BW-S9W2+

+RoHS Compliant

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

Applications

- matching
- instrumentation
- test set-ups

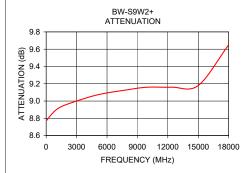
Electrical Specifications

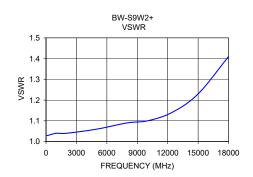
| FREQ. RANGE (MHz) | ATTENUATION¹ (dB) | | | VSWR ² (:1) | | MAX. INPUT POWER ³ |
|-------------------------------|----------------------|------------|-------------|---------------------------|---------------|-------------------------------------|
| | | | DC-4 GHz | 4-8 GHz | 8-12.4 GHz | (W) |
| f _L f _U | Nom. | ACCURACY | Max. | Max. | Max. | |
| DC-18000 | 9 | -0.4, +0.8 | 1.20 | 1.25 | 1.30 | 2 |

- 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 0.5W at 100°C. Peak Power 125W max. 5µsec pulse width, 100 Hz PRF

Typical Performance Data

| Frequency (MHz) | Attenuation (dB) | VSWR (:1) |
|--------------------|---------------------|--------------|
| 100.00 | 8.78 | 1.03 |
| 199.90 | 8.80 | 1.03 |
| 1000.00 | 8.90 | 1.04 |
| 1999.90 | 8.96 | 1.04 |
| 5000.00 | 9.07 | 1.06 |
| 7999.90 | 9.13 | 1.09 |
| 9999.90 | 9.16 | 1.10 |
| 12400.10 | 9.16 | 1.14 |
| 15000.00 | 9.18 | 1.23 |
| 18000.00 | 9.65 | 1.41 |





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-Circuits 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"). Purchaspers 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