Precision Fixed Attenuator

BW-S4W2+

 50Ω

2W

4dB

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.

Features

• DC to 18000 MHz

Applications

instrumentation

matching

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

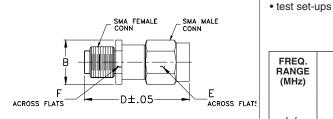
Generic photo used for illustration purposes only

CASE STYLE: FF658

Connectors Model SMA Female-SMA Male BW-S4W2+

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

Outline Drawing



Outline Dimensions (inch)

| wt | F | Ε | D | В |
|-------|------|------|-------|------|
| grams | .312 | .312 | .85 | .36 |
| 4.3 | 7 92 | 7 92 | 21.59 | 9 14 |

Electrical Specifications

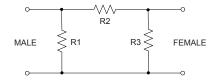
| FREQ. RANGE (MHz) | ATTENUATION¹ (dB) | | VSWR ² (:1) | | MAX. INPUT POWER ³ | |
|-------------------------------|----------------------|----------|---------------------------|------------|-------------------------------------|-----|
| | | | DC-4 GHz | 4-8 GHz | 8-12.4 GHz | (W) |
| f _L f _U | Nom. | ACCURACY | Max. | Max. | Max. | |
| DC-18000 | 4 | ±0.40 | 1.20 | 1.25 | 1.30 | 2 |

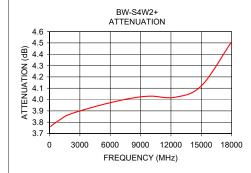
- 1. At 25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004dB/dB/°C typ.
- 2. VSWR from 12.4 to 18 GHz, 1.6:1 typ.
- 3. Average power at 25°C ambient, derate linearly to 0.5W at 100°C. Peak Power 125W max. 5µsec pulse width, 100 Hz PRF

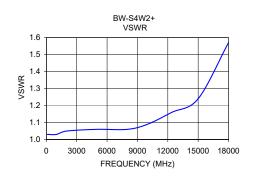
Typical Performance Data

| Frequency (MHz) | Attenuation (dB) | VSWR (:1) |
|--------------------|---------------------|--------------|
| 100.00 | 3.76 | 1.03 |
| 199.90 | 3.77 | 1.03 |
| 1000.00 | 3.82 | 1.03 |
| 1999.90 | 3.87 | 1.05 |
| 5000.00 | 3.95 | 1.06 |
| 7999.90 | 4.01 | 1.06 |
| 9999.90 | 4.03 | 1.09 |
| 12400.10 | 4.02 | 1.16 |
| 15000.00 | 4.12 | 1.24 |
| 18000.00 | 4.51 | 1.57 |
| | | |

Electrical Schematic







Notes
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-Circuit's 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"); 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