

Precision Fixed Attenuator

50Ω 20W 6dB DC to 18 GHz

BW-S6W20+

Maximum Ratings

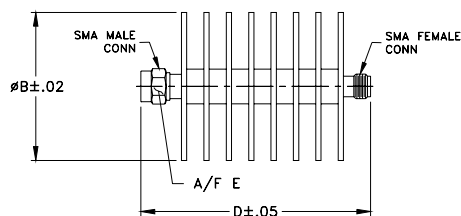
Operating Temperature -55°C to 100°C**

Storage Temperature -55°C to 100°C

**85°C with output into open or short.

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

Outline Drawing



Outline Dimensions (inch)

| A | B | C | D | E | wt |
|----|-------|----|-------|------|-------|
| -- | 1.50 | -- | 2.33 | .312 | grams |
| -- | 38.10 | -- | 59.18 | 7.92 | 49.2 |

Features

- DC to 18 GHz
- precise attenuation
- excellent VSWR, 1.30:1 typ
- stainless steel SMA male and female connectors

Applications

- matching
- instrumentation
- test set-ups
- high power measurements



Generic photo used for illustration purposes only

CASE STYLE: DC1660

| Connectors | Model |
|-------------|-----------|
| SMA-F SMA-M | BW-S6W20+ |

+RoHS Compliant

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

Electrical Specifications at 25°C

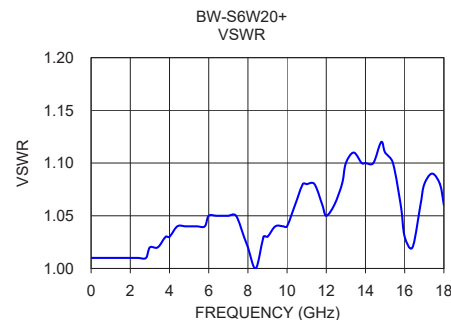
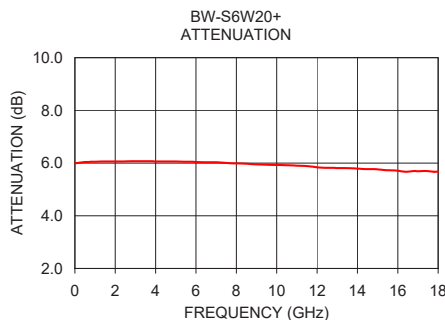
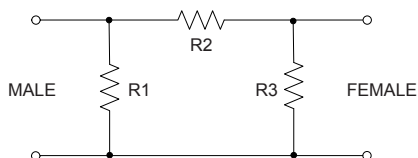
| Parameter | Condition (GHz) | Min. | Typ. | Max. | Unit |
|--------------------------|-----------------|------|------|------|------|
| Frequency Range | | DC | — | 18 | GHz |
| Attenuation | DC - 18 | — | 6 | — | dB |
| | DC - 12.4 | 5.5 | — | 6.5 | |
| | 12.4 - 18 | 5.25 | — | 6.75 | |
| VSWR | DC - 6 | — | — | 1.3 | :1 |
| | 6 - 12.4 | — | — | 1.3 | |
| | 12.4 - 18 | — | — | 1.4 | |
| Input Power ¹ | DC - 18 | — | — | 20 | W |

1. Max. power at 25°C ambient, derate linearly to 4W at 100°C. Peak power 500W max. 5μsec. pulse width, 100Hz PRF.

Typical Performance Data

| Frequency (GHz) | Attenuation (dB) | VSWR (:1) |
|-----------------|------------------|-----------|
| 0.01 | 5.99 | 1.01 |
| 2.0 | 6.06 | 1.01 |
| 4.0 | 6.06 | 1.03 |
| 6.0 | 6.04 | 1.05 |
| 8.0 | 5.99 | 1.02 |
| 10.0 | 5.93 | 1.04 |
| 12.4 | 5.82 | 1.06 |
| 14.0 | 5.79 | 1.10 |
| 16.0 | 5.71 | 1.03 |
| 18.0 | 5.68 | 1.06 |

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[BW-S6W20+](#)