



Mini-Circuits

COAXIAL

Precision Fixed Attenuator **BW-S40W2+**

50Ω 2 W 40 dB DC to 18 GHz SMA-Female to SMA-Male

FEATURES

- DC to 18 GHz
- Precision Attenuation
- Excellent VSWR, 1.20 Typ.
- Stainless Steel SMA Male and Female Connectors



Generic photo used for illustration purposes only

APPLICATIONS

- Impedance Matching
- Instrumentation
- Test Setups

| | |
|------------|------------------------|
| Model No. | BW-S40W2+ |
| Case Style | FF659 |
| Connectors | SMA-Female to SMA-Male |

+RoHS Compliant

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

ELECTRICAL SPECIFICATIONS AT +25°C

| Parameter | Frequency (GHz) | Min. | Typ. | Max. | Unit |
|------------------------------------|-----------------|------|------|------|------|
| Frequency Range | | DC | | 18 | GHz |
| Attenuation, Nominal | | | 40 | | dB |
| Attenuation, Accuracy ¹ | DC - 18 | | ±1.5 | | dB |
| VSWR ² | DC - 4 | | | 1.20 | :1 |
| | 4 - 8 | | | 1.25 | |
| | 8 - 12.4 | | | 1.30 | |
| Input Power ³ | | | | 2.0 | W |

1. At +25°C, accuracy includes frequency and power variations. Temperature coefficient for attenuation: .0004 dB/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 0.5 W at +100°C. Peak Power 125 W max. 5 μsec. pulse width, 100 Hz PRF.

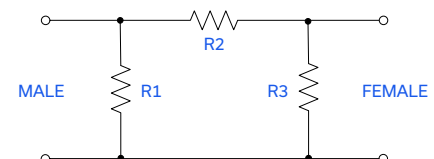
ABSOLUTE MAXIMUM RATINGS

| Parameter | Ratings |
|----------------------------------|-----------------|
| Operating Temperature | -55°C to +100°C |
| Storage Temperature ⁴ | -55°C to +100°C |

4. With mated connectors. Unmated, +85°C max.

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

ELECTRICAL SCHEMATIC



REV. H
ECO-024322
BW-S40W2+
MCL NY
250127





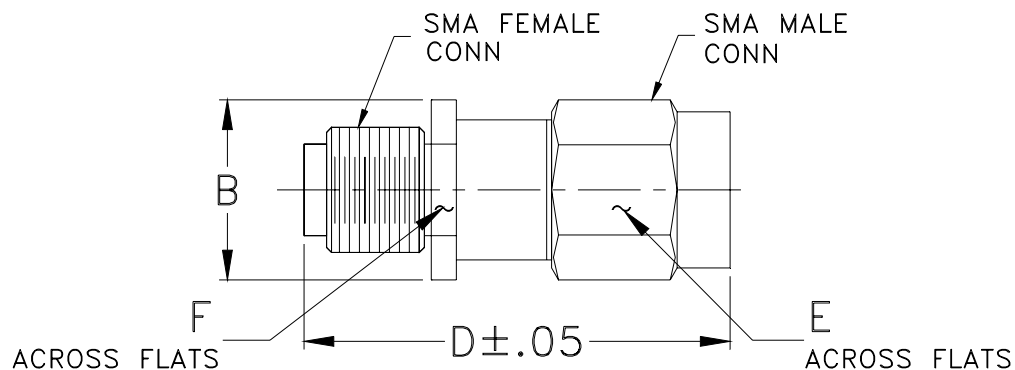
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OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch mm)

| B | D | E | F | wt |
|------|-------|------|------|-------|
| .36 | .99 | .312 | .312 | grams |
| 9.14 | 25.15 | 7.92 | 7.92 | 5.1 |



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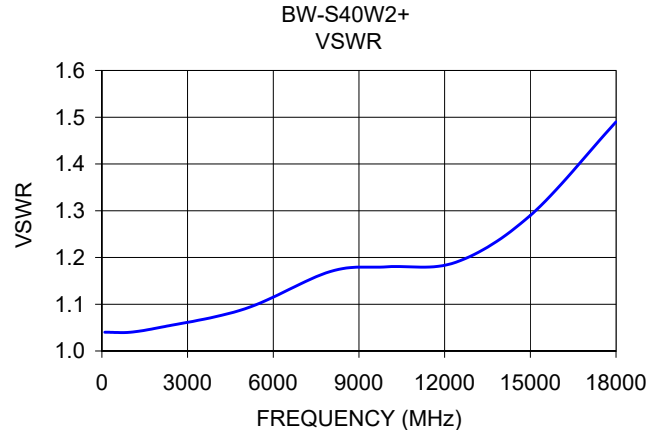
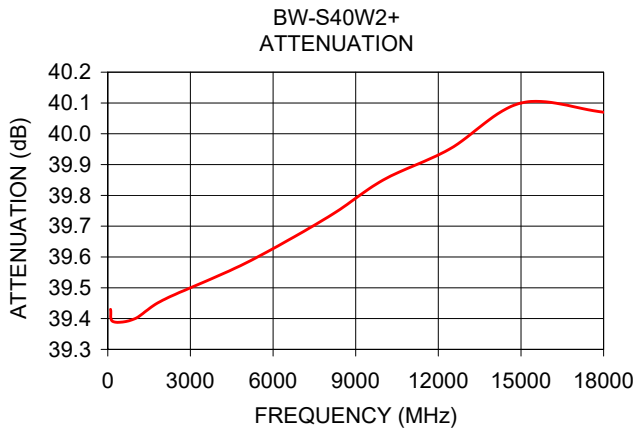
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TYPICAL PERFORMANCE DATA AND CHARTS

| Frequency (MHz) | Attenuation (dB) | VSWR (:1) |
|-----------------|------------------|-----------|
| 100.00 | 39.43 | 1.04 |
| 199.90 | 39.39 | 1.04 |
| 1000.00 | 39.40 | 1.04 |
| 1999.90 | 39.46 | 1.05 |
| 5000.00 | 39.58 | 1.09 |
| 7999.90 | 39.73 | 1.17 |
| 9999.90 | 39.85 | 1.18 |
| 12400.10 | 39.95 | 1.19 |
| 15000.00 | 40.10 | 1.29 |
| 18000.00 | 40.07 | 1.49 |



NOTES

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- 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/terms/viewterm.html

