

Coaxial Bandpass Filter

50Ω 800 to 1050 MHz

VBFZ-925-S+



Generic photo used for illustration purposes only

CASE STYLE: FF1145

| Connectors | Model |
|------------|-------------|
| SMA | VBFZ-925-S+ |

+RoHS Compliant

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

Maximum Ratings

| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 7W at 25°C |

*Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

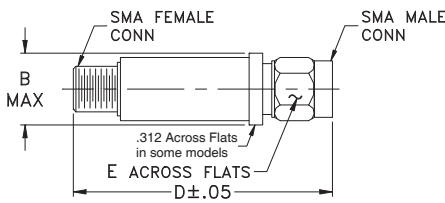
Features

- Good Rejection, 30dB up to 18GHz
- Low insertion loss
- Excellent power handling, 7W
- Temperature stable LTCC internal structure
- Rugged stainless steel unbody
- Protected by US Patent 6,943,646

Application

- Harmonic rejection
- Transmitters/receivers
- Lab use
- Test instrumentation

Outline Drawing



Outline Dimensions (inch mm)

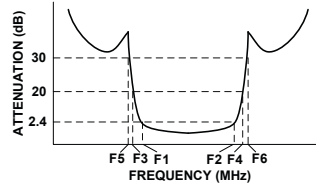
| B | D | E | wt. |
|-------|-------|------|-------|
| .410 | 1.91 | .312 | grams |
| 10.41 | 48.51 | 7.92 | 11.8 |

Note: Please refer to case style drawing for details

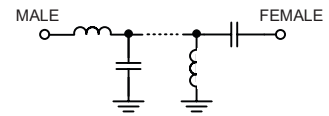
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

| CENTER FREQ. (MHz) Fc | PASSBAND (MHz) (Loss < 2.4dB) | STOPBANDS (MHz) | | | | VSWR (:1) | | |
|--------------------------|----------------------------------|-----------------|------|-----------------|--------------|-----------|------|----------|
| | | (Loss > 20dB) | | (Loss 30dB Typ) | | Passband | | Stopband |
| | F1 - F2 | F3 | F4 | F5 | F6 | Typ. | Max. | Typ. |
| 925 | 800 - 1050 | 530 | 1550 | 500 | 1620 - 18000 | 1.6 | 2.3 | 20 |

Typical Frequency Response



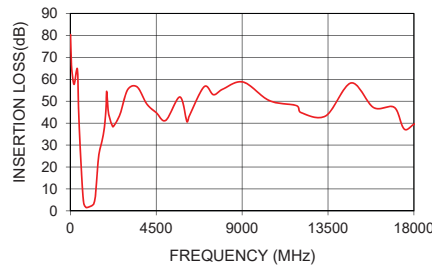
Functional Schematic



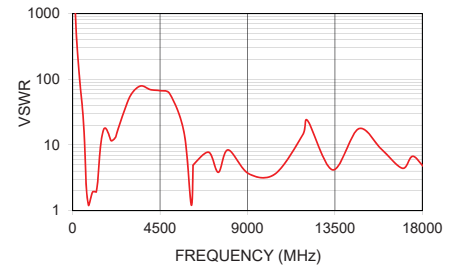
Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 10 | 82.20 | 5351.75 |
| 80 | 64.21 | 1835.80 |
| 250 | 57.35 | 237.24 |
| 500 | 31.16 | 37.91 |
| 530 | 25.79 | 29.70 |
| 595 | 15.40 | 15.05 |
| 643 | 8.76 | 7.03 |
| 670 | 5.89 | 4.29 |
| 702 | 3.60 | 2.48 |
| 800 | 1.68 | 1.22 |
| 925 | 1.64 | 1.51 |
| 1050 | 2.16 | 1.95 |
| 1275 | 5.42 | 2.40 |
| 1350 | 11.88 | 4.65 |
| 1435 | 21.92 | 9.23 |
| 1550 | 28.36 | 15.45 |
| 1620 | 30.79 | 17.53 |
| 3000 | 54.45 | 58.52 |
| 8000 | 54.31 | 8.38 |
| 18000 | 34.91 | 1.68 |

VBFZ-925-S+
INSERTION LOSS



VBFZ-925-S+
VSWR



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-Circuit's 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/MCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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Page 1 of 1