

# Coaxial Bandpass Filter

50Ω 1350 to 1450 MHz

## VBFZ-1400-S+



Generic photo used for illustration purposes only

CASE STYLE: FF1145

Connectors	Model
SMA	VBFZ-1400-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.

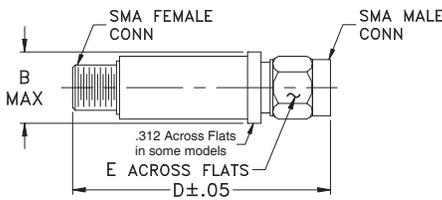
### Features

- Good Rejection, 30dB up to 6600GHz
- Low insertion loss
- Excellent power handling, 7W
- Temperature stable LTCC internal structure
- Rugged stainless steel unibody
- Protected by US Patent 6,943,646

### Applications

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

### Outline Drawing



### Outline Dimensions (inch mm)

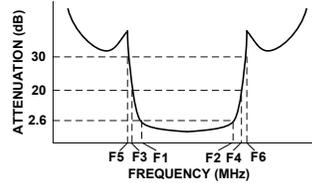
B	D	E	wt.
.410	1.91	.312	grams
10.41	48.51	7.92	11.8

Note: Please refer to case style drawing for details

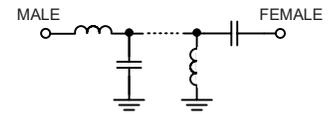
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz) Fc	PASSBAND (MHz) (Loss < 2.6dB)	STOPBANDS (MHz)				VSWR (:1)		
		(Loss > 20dB)		(Loss 30dB Typ)		Passband		Stopband
	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
1400	1350 - 1450	890	1965	870	1965 - 6600	1.6	2.3	20

### Typical Frequency Response

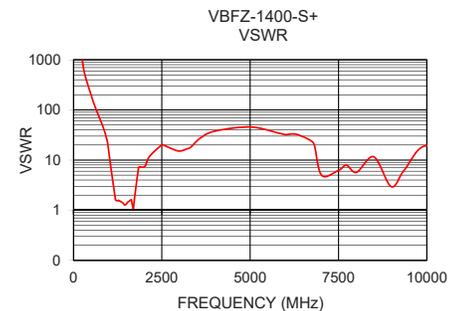
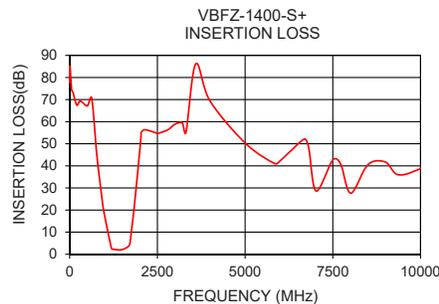


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	86.42	12105.11
250	68.43	729.08
870	31.80	39.48
890	29.20	35.32
990	17.27	17.76
1065	9.43	7.43
1132	4.55	2.89
1350	2.05	1.54
1400	1.97	1.38
1450	1.97	1.27
1690	3.82	1.11
1755	8.63	3.09
1812	16.96	6.22
1900	30.79	7.30
1940	37.12	7.18
1965	41.68	7.18
3000	58.86	15.09
5000	50.16	45.80
6600	53.10	26.65
10000	38.71	18.90



### 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-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

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[www.minicircuits.com](http://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