

# Coaxial Bandpass Filter

50Ω 4900 to 6200 MHz

## VBFZ-5500-S+



Generic photo used for illustration purposes only

CASE STYLE: FF1145

Connectors	Model
SMA	VBFZ-5500-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.

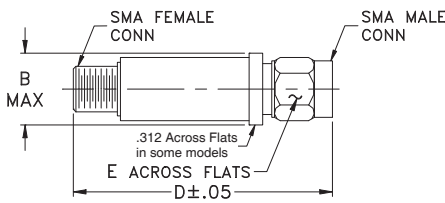
### Features

- Good Rejection, 30dB up to 17GHz
- 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)

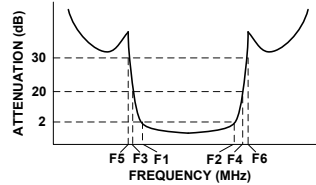
B	D	E	wt.
.410	1.91	.312	grams
10.41	48.51	7.92	11.8

Note: Please refer to case style drawing for details

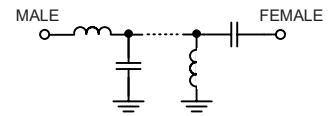
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz) Fc	PASSBAND (MHz) (Loss < 2dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)		
		(Loss > 20dB)		(Loss 30dB Typ)		Passband		Stopband
		F3	F4	F5	F6	Typ.	Max.	Typ.
5500	4900 - 6200	3600	8600	3500	8600 - 17000	1.3	2.1	20

### Typical Frequency Response

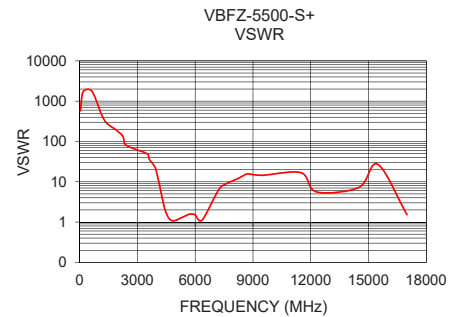
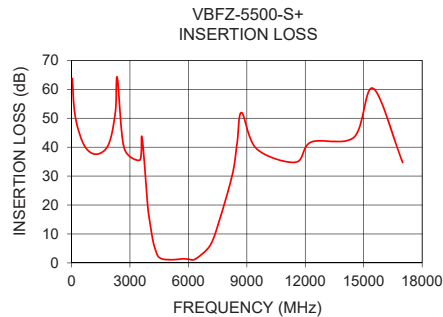


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	60.32	868.59
1500	37.93	157.93
3500	35.51	49.64
3600	41.94	39.49
3750	30.57	30.49
4000	15.08	17.05
4150	8.84	8.31
4300	4.47	3.66
4450	2.28	1.91
4900	1.14	1.07
5500	1.26	1.43
6200	1.27	1.32
6800	2.83	2.39
7000	4.82	4.03
7300	8.94	7.05
7700	15.82	8.81
8200	28.73	11.77
8600	48.53	15.00
10000	39.46	10.50
17000	34.71	1.53



### 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](http://www.minicircuits.com/MCLStore/terms.jsp)

