Coaxial

Bandpass Filter

VBFZ-1690+

50Ω 1455 to 1925 MHz

CASE STYLE: FF1145

Connectors	Model
SMA	VBFZ-1690-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.

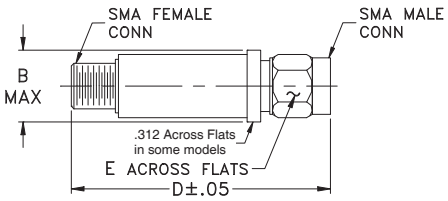
Features

- Good Rejection, 30dB up to 9GHz
- 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



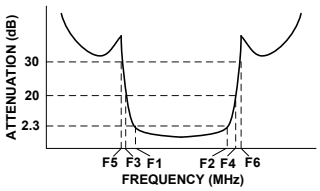
Outline Dimensions (inch / mm)

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

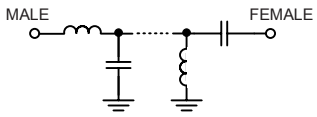
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2.3dB)	STOPBANDS (MHz) (Loss > 20dB)		(Loss 30dB Typ)		VSWR (:1) Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
1690	1455 - 1925	930	2600	860	2600 - 9000	1.5	2.1	20

Typical Frequency Response

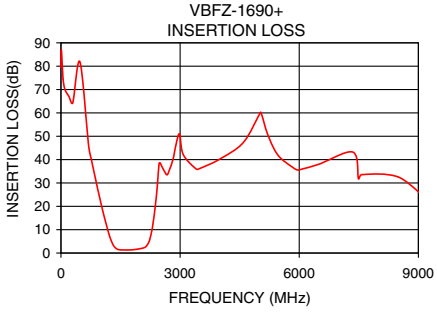


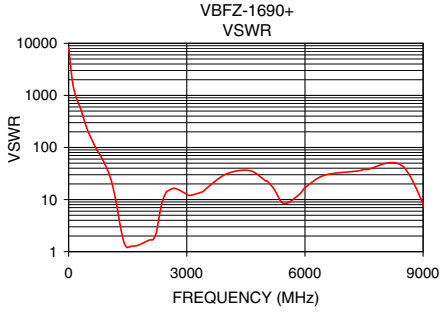
Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	86.61	10115.69
80	73.10	5119.22
250	64.79	643.00
860	32.45	58.56
930	27.04	46.34
1095	15.22	21.49
1222	7.44	7.65
1323	3.21	2.82
1455	1.45	1.25
1690	1.31	1.29
1925	1.61	1.52
2152	2.95	1.73
2226	5.12	2.31
2305	11.33	5.02
2380	20.83	9.21
2460	36.26	13.08
2600	33.24	16.19
5000	59.51	22.99
6800	39.14	31.52
9000	28.16	24.29





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