

Coaxial Bandpass Filter

VBF-4440+

50Ω 4200 to 4700 MHz

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	1.5W at 25°C

*Passband rating, derate linearly to 0.25W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Features

- Good VSWR, 1.2:1 Typ @ Passband
- Rugged uni-body construction, small size
- Temperature stable

Applications

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



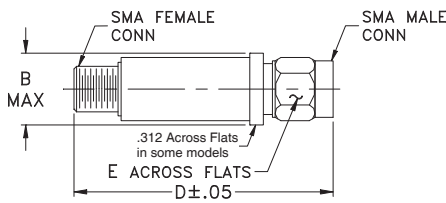
CASE STYLE: FF704

Connectors	Model
SMA	VBF-4440+

+RoHS Compliant

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

Outline Drawing



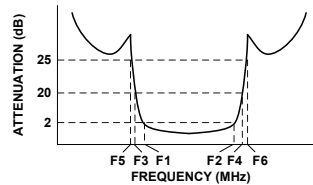
Outline Dimensions (inch/mm)

B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

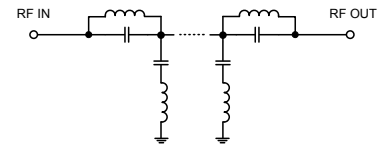
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)	
		Loss > 20dB F3	Loss > 20dB F4	Loss 25dB Typ F5	Loss 25dB Typ F6	Passband Max.	Stopband Typ.
4440	4200 - 4700	2000	6750	2000	6650 - 12000	1.6	20

Typical Frequency Response

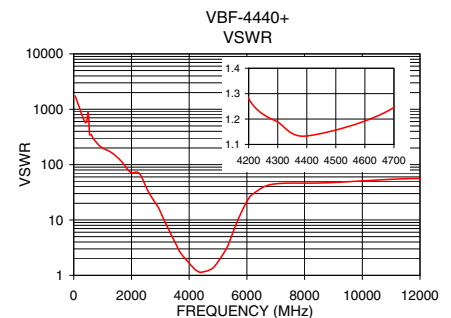
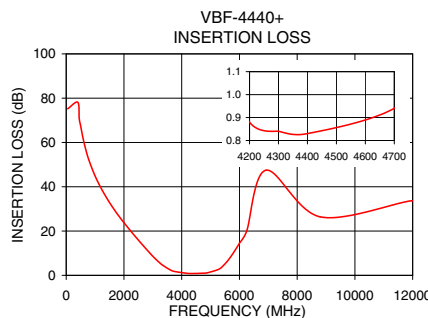


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	75.21	1737.18
500	67.47	868.59
1000	44.89	868.59
2000	23.83	96.51
2300	19.02	54.29
2900	9.98	18.50
3300	4.99	6.49
3700	1.99	2.58
4200	0.88	1.28
4440	0.84	1.13
4700	0.94	1.25
5000	1.36	1.70
5400	3.89	4.12
5650	7.53	8.86
6000	14.41	21.73
6650	31.12	44.55
6750	35.25	43.44
9000	26.00	42.38
12000	34.49	52.65



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

