

# 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



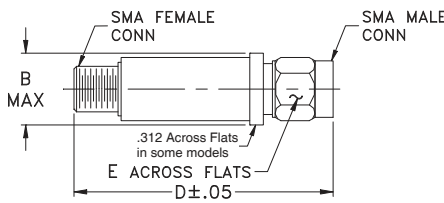
Generic photo used for illustration purposes only  
CASE STYLE: FF704

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)

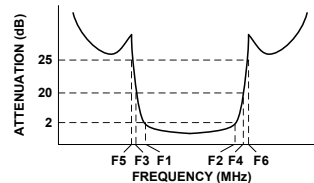
B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

Note: Please refer to case style drawing for details

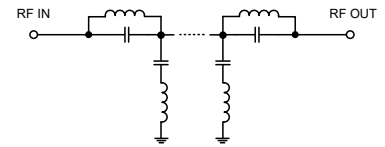
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

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

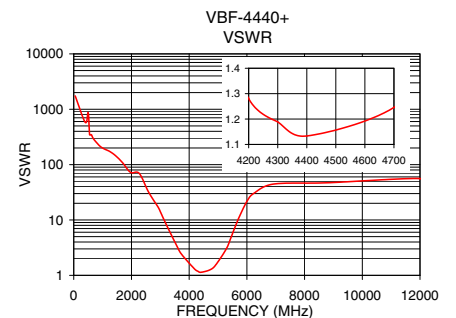
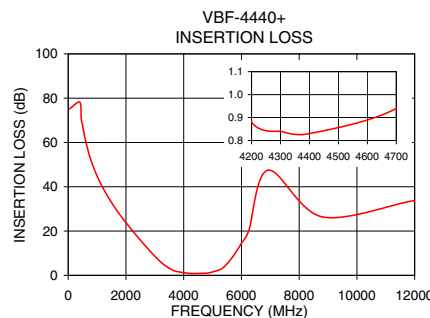


### Functional Schematic



### 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.
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