

CAVITY Bandpass Filter **ZVBP MODEL SERIES**

50Ω DC to 57 GHz

THE BIG DEAL

- Very low insertion loss with excellent power handling
- · Fast roll-off with wide stopband
- Passbands upto 36 GHz
- Stopband up to 57 GHz



PRODUCT OVERVIEW

Mini-Circuits' cavity filters are designed by implementing resonant structures with very high Q and are ideal for narrow-band, high-selectivity applications. These designs can provide bandwidths as narrow as 0.5% with very high selectivity and excellent low noise floor. Low insertion loss combined with excellent power handling makes them well-suited for transmitter and receiver front end. Advanced filter design and construction enables stopband width greater than 3x the center frequency.

Mini-Circuits' cavity filters feature a special protective assembly to prevent accidental de-tuning that would otherwise require expensive replacement or return to factory for re-tuning. Precise machining allows realization of cavity filters with small form factors for applications where size is critical. Excellent repeatability across units is achieved through precise tuning and process control.

KEY FEATURES

Feature	Advantages				
Low insertion loss	Low signal loss results in better SNR in receiver front end and better power delivery to antenna in transmitter.				
Fast roll-off	Higher selectivity results in better adjacent channel rejection and dynamic range				
Wide stopband	Wide spur free band results in better receiver sensitivity				
High power handling	Well suited for transmitter application				
Protective assembly	Prevents accidental de-tuning of precisely tuned resonant circuit				



CAVITY Bandpass Filter

ZVBP-3260-S+

3180 to 3340 MHz SMA-Female 50Ω

FEATURES

- Low Insertion loss, 1.7dB typ.
- Good Return loss, 20dB typ.
- · Great Rejection (40 to 100 dB typ.)
- Stopband up to 7000 MHz

APPLICATIONS

- Test & Measurement Equipment
- · Radar, EW, and ECM Defense Systems



Generic photo used for illustration purposes only

Model No.	ZVBP-3260-S+
Case Style	WZ3389
Connectors	SMA-FEMALE

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

ELECTRICAL SPECIFICATIONS AT 25°C

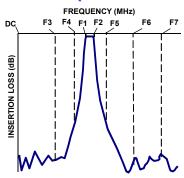
Para	meter	F#	Frequency (MHz)	Min.	Тур.	Max.	Units
	Center Frequency	Fc	-	-	3260	-	MHz
Passband	Insertion Loss	F1-F2	3180 - 3340	-	1.7	2.2	dB
	Return Loss	F1-F2	3180 - 3340	14	20	-	dB
Stop Band, Lower Rejection	Daiantian	DC-F3	DC - 3135	40	44	-	dB
	Rejection	F3-F4	3135 - 3160	14	18	-	dB
Stop Band, Upper	B : ::	F5-F6	3360 - 3380	15	23	-	dB
	Rejection	F6-F7	3380 - 7000	40	46	-	dB

MAXIMUM RATINGS

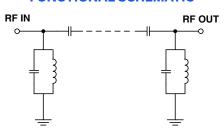
Parameter	Ratings
Operating temperature	-40°C to +85°C
Storage temperature	-55°C to +100°C
RF Power Input	20W max. at 25°C

Permanent damage may occur if any of these limits are exceeded Input and output ports are DC short to ground.

TYPICAL FREQUENCY RESPONSE



FUNCTIONAL SCHEMATIC



Bandpass Filter

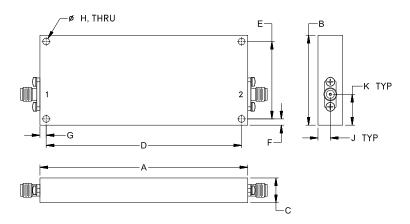
ZVBP-3260-S+

COAXIAL CONNECTIONS

PORT 1	SMA-Female
PORT 2	SMA-Female

CAVITY

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inches)

F	E	D	С	В	Α
.12	1.490	3.760	.48	1.73	4.00
3.0	37.85	95.50	12.1	43.9	101.6
Wt.		K	J	Н	G
grams		.59	.24	.130	.12
210		15.1	6.0	3.3	3.0

Note. Please refer to case style drawing for details

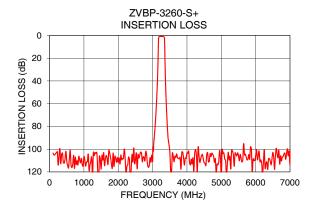


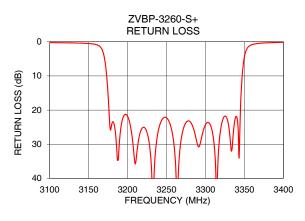
Bandpass Filter

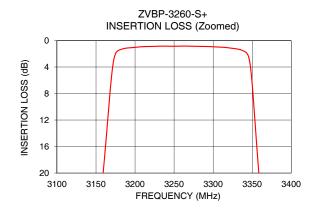
ZVBP-3260-S+

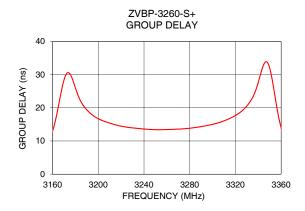
TYPICAL PERFORMANCE DATA AT 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	GROUP DELAY (ns)
100	103.43	0.03	3180	25.96
1000	106.47	0.07	3190	19.34
3135	43.96	0.38	3200	16.70
3150	30.45	0.52	3210	15.38
3160	18.88	0.85	3220	14.46
3172	3.43	7.43	3230	13.95
3180	1.43	23.87	3240	13.61
3260	0.85	31.14	3250	13.40
3340	1.65	21.98	3260	13.44
3347	3.32	10.08	3270	13.58
3360	22.20	0.83	3280	13.83
3370	34.90	0.44	3290	14.33
3380	45.23	0.30	3300	15.01
5000	124.16	0.20	3320	17.67
7000	113.48	0.04	3340	27.69









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

