

# Surface Mount Bandpass Filter

## SXBP-350+

50Ω 330 to 375 MHz

### Maximum Ratings

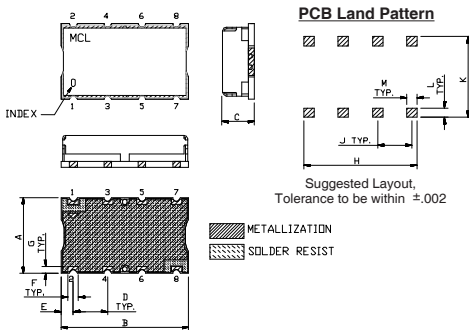
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

INPUT	1
OUTPUT	8
GROUND	2, 3, 4, 5, 6, 7

### Outline Drawing

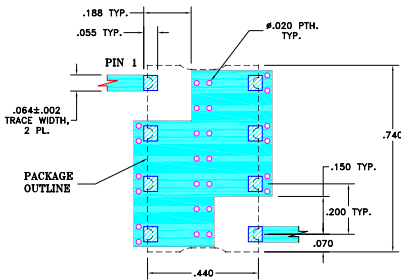


### Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.44	.74	.27	.200	.07	.060	
11.18	18.80	6.86	5.08	1.78	1.52	
G	H	J	K	L	M	wt.
.040	.660	.200	.470	.055	.060	grams
1.02	16.76	5.08	11.94	1.40	1.52	3.0

Note: Please refer to case style drawing for details

### Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)



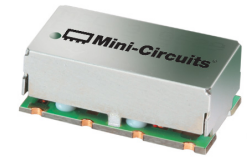
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

### Features

- high rejection
- Flat group delay @ passband
- good VSWR, 1.2:1 typ @ passband
- shielded case
- aqueous washable

### Applications

- radio link
- receivers / transmitters
- harmonic rejection



Generic photo used for illustration purposes only  
CASE STYLE: HF1139

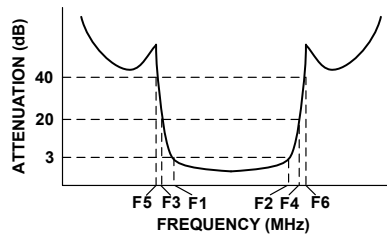
### +RoHS Compliant

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

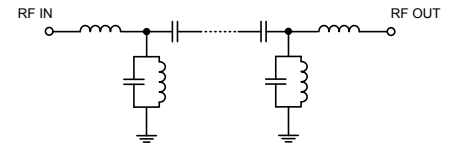
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
F <sub>c</sub>	F <sub>1</sub> - F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	F <sub>5</sub>	F <sub>6</sub>	Typ.	Max.	Typ.
350	330 - 375	280	435	245	520 - 2000	1.2	1.5	20

### Typical Frequency Response

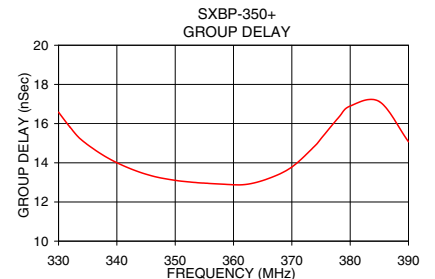
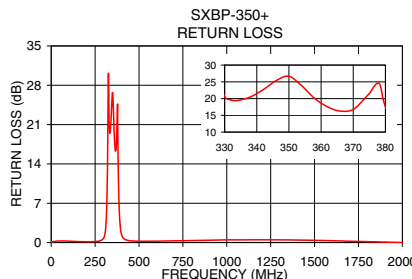
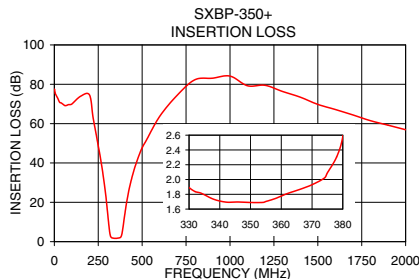


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
0.5	77.48	2.27	0.24	330.0	16.58
245.0	51.21	0.45	0.22	332.0	15.81
280.0	32.44	0.51	0.29	334.0	15.15
300.0	17.62	0.71	1.01	338.0	14.32
310.0	8.62	0.78	3.07	342.0	13.74
315.0	4.82	0.59	6.57	346.0	13.33
320.0	2.74	0.32	15.40	350.0	13.10
330.0	1.89	0.19	17.22	354.0	12.98
342.0	1.69	0.20	22.55	355.0	12.96
350.0	1.69	0.19	26.48	358.0	12.91
366.0	1.87	0.19	19.67	362.0	12.89
375.0	2.09	0.18	23.06	366.0	13.20
385.0	4.07	0.24	11.76	370.0	13.78
392.0	7.99	0.31	5.74	375.0	15.23
405.0	16.28	0.29	2.56	378.0	16.30
435.0	30.23	0.18	1.21	380.0	16.90
520.0	50.91	0.07	0.55	385.0	17.12
2000.0	56.91	0.26	0.35	390.0	15.07



### 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.
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