

Surface Mount Bandpass Filter

SXBP-820+

50Ω 769 to 872 MHz

Maximum Ratings

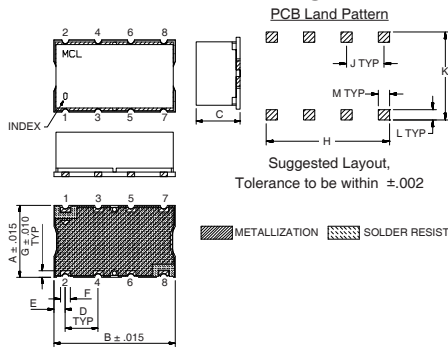
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

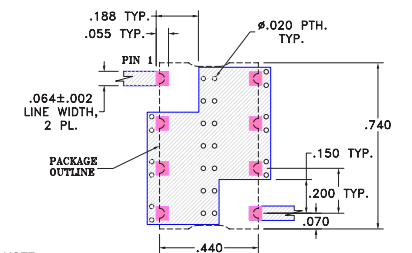


Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.440	.740	.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:
1. 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.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

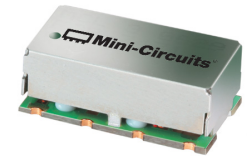
□ DENOTES PCB COPPER LAYOUT
□ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- High Rejection
- Flat Group Delay
- Shielded case
- Aqueous washable

Applications

- Mobile TV
- Receivers / Transmitters
- Harmonic rejection



Generic photo used for illustration purposes only
CASE STYLE: HF1139

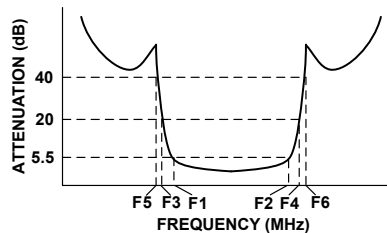
+RoHS Compliant

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

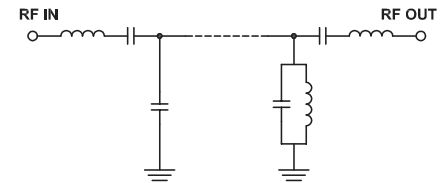
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 5.5dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
F _c	F ₁ - F ₂	F ₃	F ₄	F ₅	F ₆	Typ.	Max.	Typ.
820	769 - 872	550	920	450	1000 - 2600	1.7	2.3	20

Typical Frequency Response

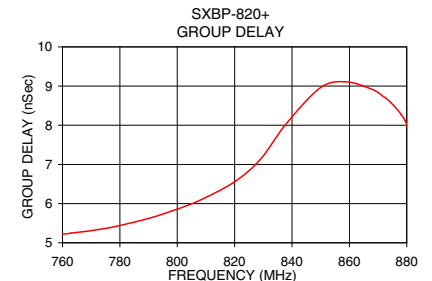
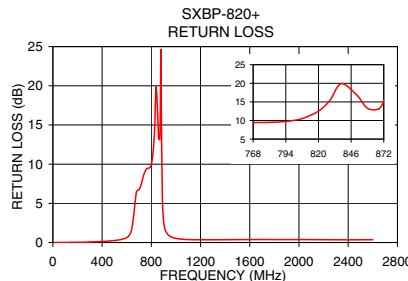
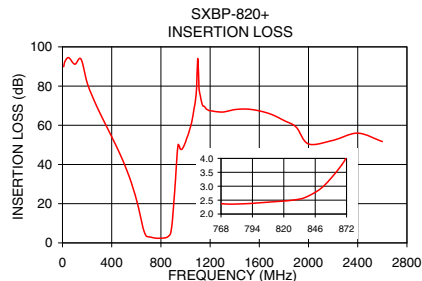


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
10	89.91	3.72	0.01	760	5.22
100	91.17	3.09	0.01	766	5.27
450	47.71	0.32	0.18	769	5.30
550	32.51	0.37	0.46	772	5.33
619	17.67	0.77	0.88	778	5.41
640	11.85	0.92	1.63	790	5.62
658	6.91	0.76	3.61	799	5.83
769	2.37	0.19	9.46	808	6.09
799	2.40	0.13	9.95	820	6.56
820	2.47	0.11	12.51	829	7.13
850	2.90	0.28	17.04	838	8.04
872	4.05	0.30	15.27	850	8.96
880	5.13	0.54	19.23	859	9.11
890	9.27	1.73	5.58	868	8.91
900	16.48	2.56	2.71	872	8.73
920	33.32	3.78	1.36	874	8.61
1000	51.37	0.64	0.53	876	8.46
2600	51.67	0.63	0.36	880	8.01



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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DAVID HAIMOVICH	<i>DH</i>	09 Feb', 2009	
APPROVED BY:	HK	13 Feb', 2009	

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