

Bandpass Filter

Features

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

Applications

- Mobile TV
- Receivers / Transmitters
- Harmonic rejection

HT-SXBP-820+



50Ω 769 to 872 MHz

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

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 5.5dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 40dB)		Passband		Stopband
F _c	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
820	769-872	550	920	450	1000-2600	1.7	2.3	20

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	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

Maximum Ratings

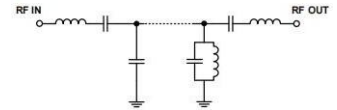
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

RF Power Input* 0.5W max.

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

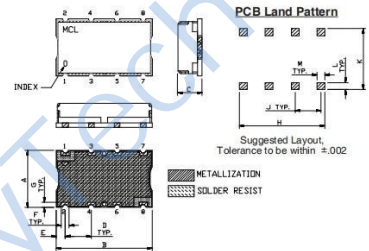
Functional Schematic



Pad Connections

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

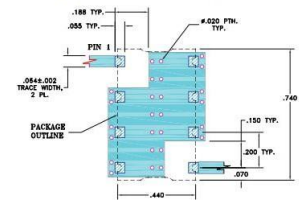
Outline Drawing



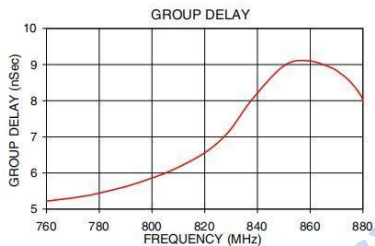
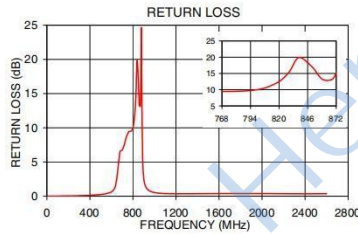
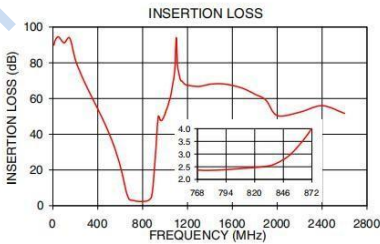
Outline Dimensions: Unit (mm)

A	11.18	D	5.08	G	1.02
B	18.80	E	1.78	H	16.76
C	6.86	F	1.52	J	5.08
L	1.40	M	1.52	K	11.94
wt	3.0				

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



- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .005" (125μm) 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 WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



Typical Frequency Response

