

Features

- high rejection
- good VSWR, 1.3:1 typ @ passband
- aqueous washable

Applications

- radio link
- receivers / transmitters
- professional mobile radio / public access mobile radio (PMR/ PAMR)

HT-SXBP-169+



50Ω 164 to 174 MHz

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

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB) F1 - F2	STOPBAND (MHz)				VSWR	
		(Loss > 20dB) F3 F4		(Loss > 40dB) F5 F6		Passband Typ.	Stopband Typ.
169	164-174	137	205	122	240-2500	1.3	18

Maximum Ratings

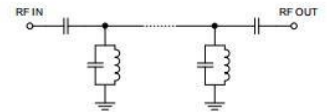
Operating Temperature -40°C to 85°C

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



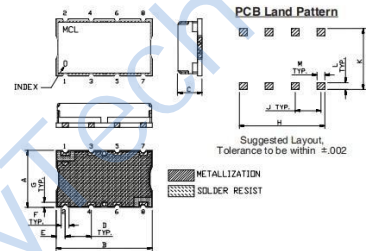
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	χ	σ			
1.0	82.10	2.30	0.38	155.0	41.11
110.0	62.23	0.84	0.15	156.0	38.37
122.0	50.32	0.82	0.15	158.0	34.97
126.0	45.85	0.92	0.17	160.0	32.58
137.0	31.35	1.24	0.40	161.0	31.67
140.0	26.73	1.37	0.53	162.0	31.02
150.0	7.41	1.62	5.90	163.0	30.49
152.0	4.56	1.09	12.24	164.0	30.13
164.0	2.04	0.03	18.54	165.0	29.92
169.0	2.00	0.02	20.31	166.0	29.86
174.0	2.28	0.07	14.37	167.0	29.85
185.0	7.34	1.60	3.16	168.0	29.85
190.0	15.14	1.79	1.33	169.0	29.87
205.0	31.92	1.00	0.52	170.0	29.85
240.0	51.59	0.57	0.22	172.0	29.68
1000.0	79.07	3.14	0.10	174.0	30.40
2000.0	60.93	0.84	0.32	175.0	31.30
2500.0	52.98	0.33	0.37	180.0	42.56

Pad Connections

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

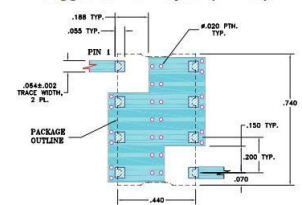
Outline Drawing



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: .002" (50μm) 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 SMDSC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

