

Features

- excellent rejection
- flat group delay @ passband
- good VSWR, 1.15:1 typ.@ passband

Applications

- receivers / transmitters
- industrial communications

HT-SXBP-162+



50Ω 155 to 169 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.
162	155-169	138	200	127	280-1600	1.6	20

Maximum Ratings

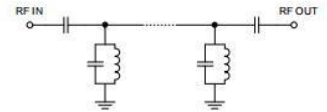
Operating Temperature -40°C to 85°C

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



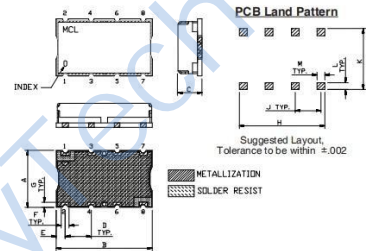
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	α	σ			
0.3	91.44	6.36	0.00	155.0	57.53
127.0	51.02	0.97	0.20	152.0	49.26
138.0	30.32	1.08	0.56	154.0	42.59
144.0	15.76	1.45	1.66	155.0	40.50
147.0	7.97	1.38	4.50	156.0	38.52
149.0	4.46	0.74	9.93	158.0	35.89
155.0	2.15	0.06	19.50	160.0	34.70
162.0	1.86	0.04	23.33	162.0	33.30
169.0	2.09	0.11	21.10	164.0	32.96
174.0	4.39	0.60	6.77	166.0	33.44
178.0	9.25	0.75	2.21	167.0	33.63
185.0	18.09	0.55	0.68	168.0	34.87
200.0	30.23	0.29	0.24	169.0	37.19
280.0	50.05	0.14	0.10	171.0	38.21
400.0	56.89	0.29	0.14	173.0	41.19
800.0	67.07	1.31	0.26	175.0	38.37
1200.0	59.27	0.90	0.31	178.0	26.51
1600.0	50.36	1.12	0.39	180.0	18.81

Pad Connections

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

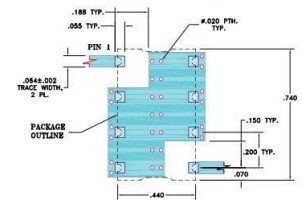
Outline Drawing



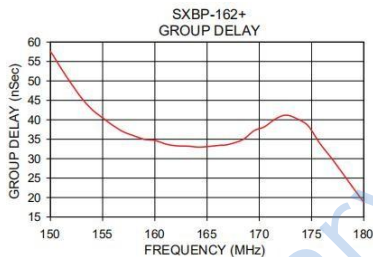
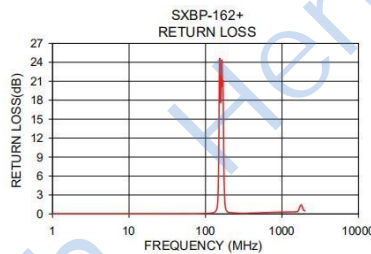
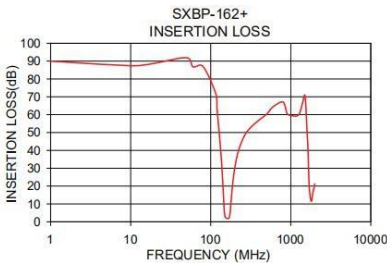
Outline Dimensions: Unit (mm)

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"±.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 WITH SMDSC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



Typical Frequency Response

