

Features

- high rejection
- flat group delay @ passband
- good VSWR, 1.3:1 typ @ passband
- shielded case
- aqueous washable

Applications

- mobile TV
- receivers / transmitters
- harmonic rejection

HT-SXBP-615+



50Ω 565 to 670 MHz

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

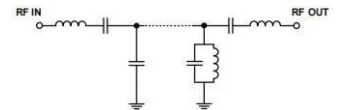
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3.5dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 40dB)		Passband		Stopband
F _c	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
615	565-670	380	720	250	740-2300	1.3	1.9	20

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.	

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	x	σ			
0.5	93.98	3.00	0.01	555.0	5.20
250.0	52.72	0.29	0.05	560.0	5.27
380.0	29.65	0.41	0.25	565.0	5.30
430.0	17.34	0.64	0.80	570.0	5.32
450.0	11.22	0.78	1.85	580.0	5.33
470.0	5.30	0.60	6.58	590.0	5.36
565.0	1.43	0.04	12.98	600.0	5.45
580.0	1.30	0.02	17.97	610.0	5.68
615.0	1.42	0.05	22.32	615.0	5.84
640.0	1.74	0.08	18.33	620.0	5.99
670.0	2.58	0.08	12.75	630.0	6.21
690.0	6.56	1.62	7.05	640.0	6.63
700.0	13.84	2.34	3.07	650.0	7.32
710.0	22.42	2.46	1.95	660.0	8.19
720.0	31.31	2.80	1.46	670.0	9.71
740.0	53.80	3.72	1.01	673.0	10.51
1000.0	55.59	0.27	0.23	676.0	11.48
2300.0	56.85	0.49	0.34	680.0	13.06

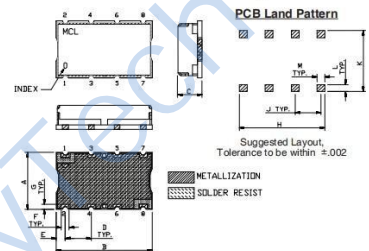
Functional Schematic



Pad Connections

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

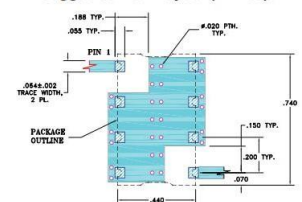
Outline Drawing



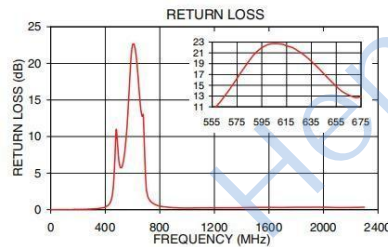
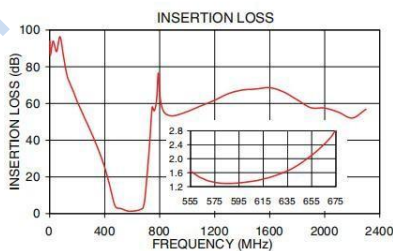
Outline Dimensions: Unit (mm)

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"±.0005" COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTIGUOUS GROUND PLANE.
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Typical Frequency Response

