

Features

- linear phase, up to ± 8 deg typ @ $F_c \pm 45$ MHz
- high rejection
- shielded case
- aqueous washable

Applications

- mobile TV
- receivers / transmitters
- harmonic rejection

HT-SXBP-640+



50Ω 600 to 680 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.

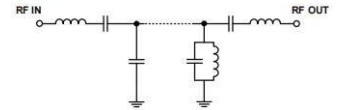
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

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.
640	600-680	500	750	425	785-2400	1.4	2.1	20

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Deviation from Linear Phase (deg.)
	x	σ			
1.0	94.11	3.80	0.01	595.0	1.11
425	51.02	0.48	0.31	600.0	-0.22
500	33.93	0.56	0.58	605.0	-0.95
550	16.28	0.78	1.67	610.0	-1.26
570	7.30	0.67	5.59	620.0	-1.08
580	4.28	0.38	14.61	625.0	-0.71
600	2.61	0.15	14.05	630.0	-0.22
622	2.26	0.13	18.76	635.0	0.34
640	2.31	0.13	20.65	640.0	0.93
660	2.62	0.15	12.97	645.0	1.51
680	2.94	0.12	12.68	650.0	2.02
700	4.90	0.35	8.72	655.0	2.38
710	8.58	0.60	6.00	660.0	2.49
730	19.78	0.70	3.83	665.0	2.20
750	31.44	0.74	2.38	670.0	1.31
785	53.01	1.44	1.18	675.0	-0.47
1000	83.88	5.74	0.22	680.0	-3.47
2400	51.09	0.34	0.39	685.0	-8.08

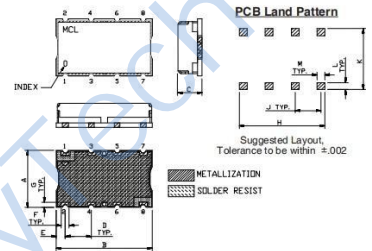
Functional Schematic



Pad Connections

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

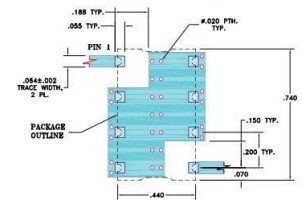
Outline Drawing



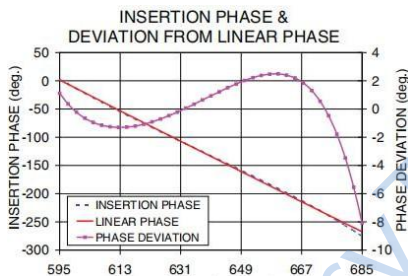
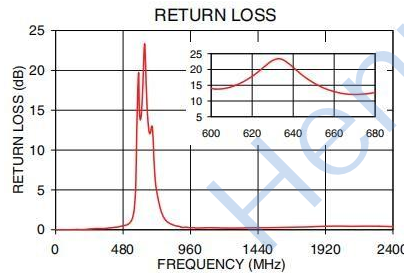
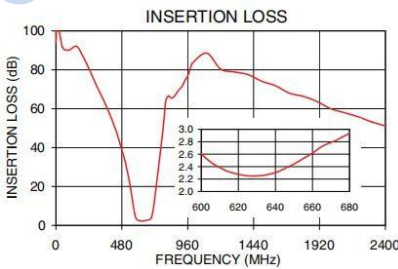
Outline Dimensions: Unit (mm)

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"±.000" 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.
- DENOTES PCB COPPER LAYOUT WITH SMDSC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



Typical Frequency Response

