

Surface Mount Bandpass Filter

SXBP-640+

50Ω 600 to 680 MHz

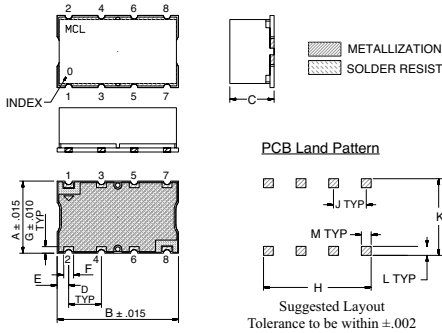
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

Pin Connections

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

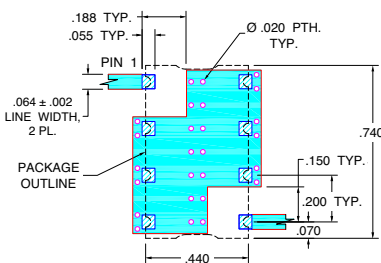
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	wt. grams
.440	.740	.27	.200	.07	.060	11.18	18.80	6.86	5.08	1.78	1.52	
						1.02	16.76	5.08	11.94	1.40	1.52	3.0

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



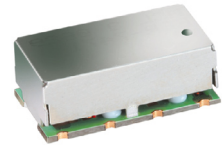
- NOTES:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- Linear Phase, up to ± 8 deg Typ @ Fc ± 45 MHz
- High Rejection
- Shielded case
- Aqueous washable

Applications

- Mobile TV
- Receivers / Transmitters
- Harmonic rejection



CASE STYLE: HF1139
PRICE: \$17.95 ea. QTY (1-9)

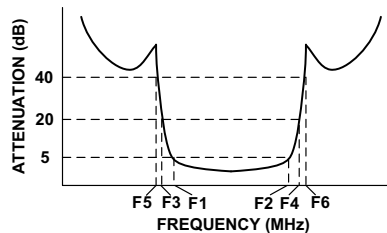
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

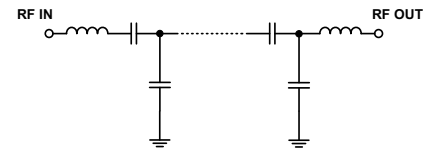
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 5dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
		Loss > 20dB		Loss > 40dB			Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 45MHz	Typ.	Max.	Typ.
640	600 - 680	500	750	425	785 - 2400	± 16	1.4	2.1	20

Typical Frequency Response

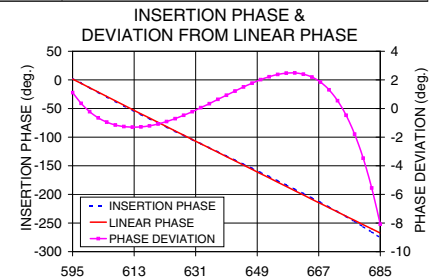
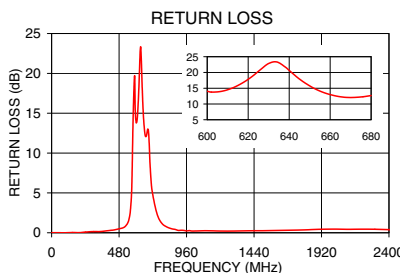


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Deviation from Linear Phase (deg.)
	\bar{x}	σ			
1.0	94.11	3.80	0.01	595.0	1.11
425.0	51.02	0.48	0.31	600.0	-0.22
500.0	33.93	0.56	0.58	605.0	-0.95
550.0	16.28	0.78	1.67	610.0	-1.26
570.0	7.30	0.67	5.59	620.0	-1.08
580.0	4.28	0.38	14.61	625.0	-0.71
600.0	2.61	0.15	14.05	630.0	-0.22
622.0	2.26	0.13	18.76	635.0	0.34
640.0	2.31	0.13	20.65	640.0	0.93
660.0	2.62	0.15	12.97	645.0	1.51
680.0	2.94	0.12	12.68	650.0	2.02
700.0	4.90	0.35	8.72	655.0	2.38
710.0	8.58	0.60	6.00	660.0	2.49
730.0	19.78	0.70	3.83	665.0	2.20
750.0	31.44	0.74	2.38	670.0	1.31
785.0	53.01	1.44	1.18	675.0	-0.47
1000.0	83.88	5.74	0.22	680.0	-3.47
2400.0	51.09	0.34	0.39	685.0	-8.08



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