

Surface Mount Bandpass Filter

SXBP-640+

50Ω 600 to 680 MHz

Maximum Ratings

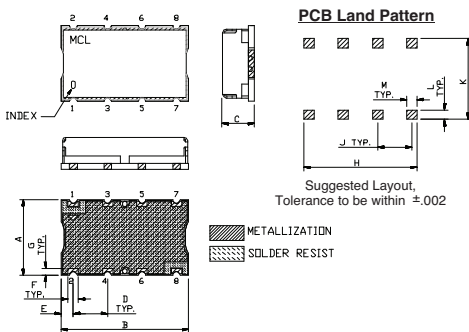
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

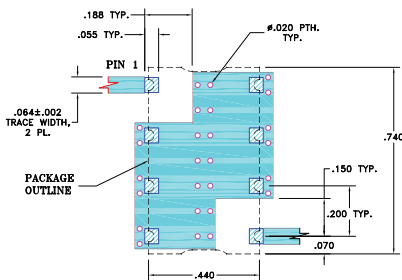
Outline Drawing



Outline Dimensions (inch/mm)

Dimension	Value (inch)	Value (mm)
A	.44	11.18
B	.74	18.80
C	.27	6.86
D	.200	5.08
E	.07	1.78
F	.060	1.52
G	.040	1.02
H	.660	16.76
J	.200	5.08
K	.470	11.94
L	.055	1.40
M	.060	1.52
wt.		3.0 grams

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



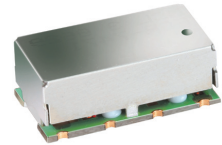
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER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

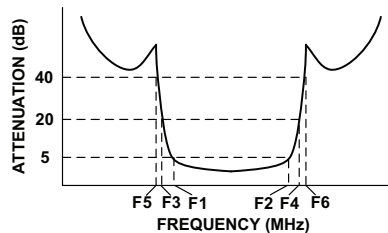
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

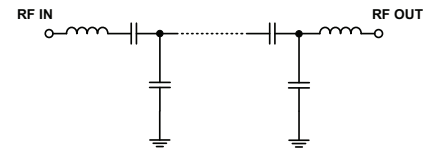
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

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

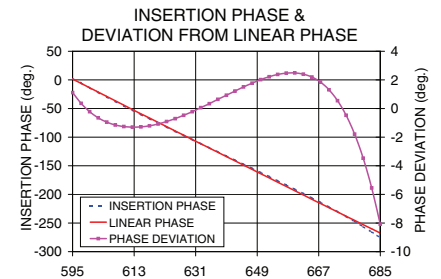
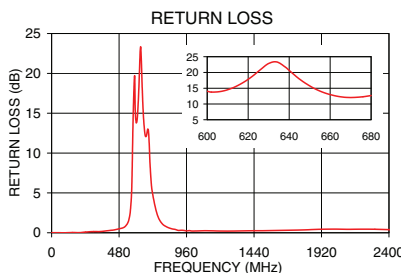


Functional Schematic



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



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED
I/F/R/MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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