

# Surface Mount Low Pass Filter

# LPF-B0R7+

50Ω DC to 0.7 MHz

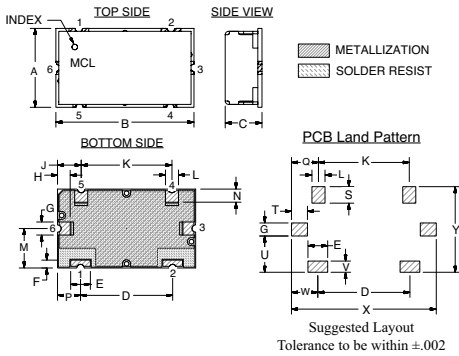
## Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25W Max

## Pin Connections

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

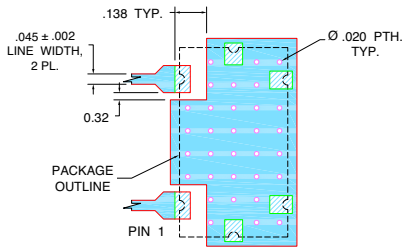
## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M
.472	.826	.220	.551	.118	.047	.078	.076	.142	.543	.078	.236
11.99	20.98	5.59	14.00	3.00	1.19	1.98	1.92	3.59	13.79	1.98	5.99
N	P	Q	S	T	U	V	W	X	Y	wt	
.079	.138	.162	.098	.096	.217	.067	.157	.866	.512	grams	
1.99	3.49	4.11	2.49	2.44	5.51	1.70	3.99	22.00	13.00	6	

## Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)



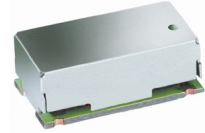
- NOTES:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES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

## Features

- High rejection
- Good VSWR, 1.2:1 Typ @ Passband
- Shielded case
- Aqueous washable

## Applications

- CDMA
- Cellular Infrastructure
- Wireless communications
- Receivers / Transmitters



CASE STYLE: HZ1198  
PRICE: \$9.35 ea. QTY (1-9)

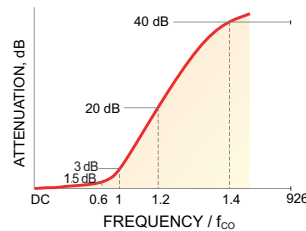
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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

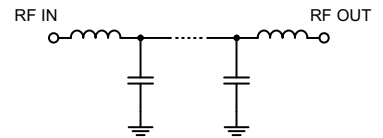
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss < 1.5dB)	(Loss > 20dB)	(Loss > 40dB)	Passband Typ.
DC - 0.7	1.08	1.30 - 1.46	1.46 - 1000	1.2	20

## Typical Frequency Response

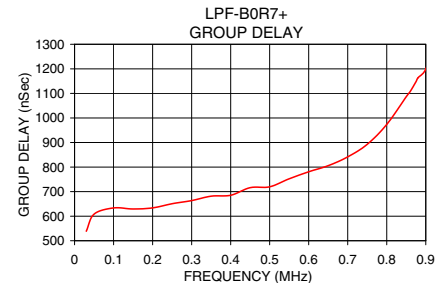
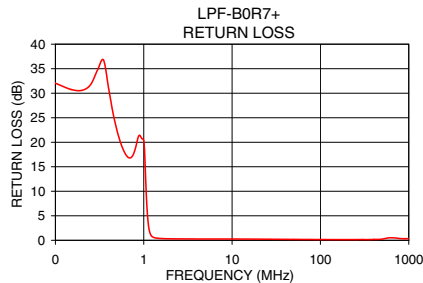
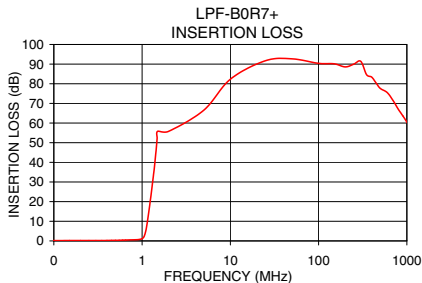


## Functional Schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec.)
	$\bar{x}$	$\sigma$			
0.03	0.15	0.03	34.75	0.03	538.62
0.10	0.17	0.00	32.92	0.05	608.42
0.30	0.20	0.01	36.13	0.10	633.47
0.50	0.30	0.01	20.02	0.20	633.74
0.60	0.39	0.02	16.34	0.30	663.36
0.70	0.48	0.03	15.13	0.35	681.41
0.96	0.85	0.07	23.81	0.40	685.22
1.04	1.83	0.32	15.11	0.45	716.25
1.08	3.57	0.67	7.87	0.50	719.68
1.12	6.81	0.98	3.70	0.55	752.13
1.18	13.39	1.13	1.36	0.60	780.74
1.30	27.77	1.19	0.55	0.65	805.77
1.46	49.02	1.83	0.39	0.70	841.39
5.00	66.53	0.61	0.24	0.75	892.61
10.00	82.33	2.26	0.25	0.80	973.76
100.00	90.40	4.41	0.14	0.85	1086.39
500.00	77.60	1.99	0.20	0.88	1163.22
1000.00	60.51	0.93	0.31	0.90	1198.79



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