

# Surface Mount Low Pass Filter

50Ω DC to 0.3 MHz

## Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

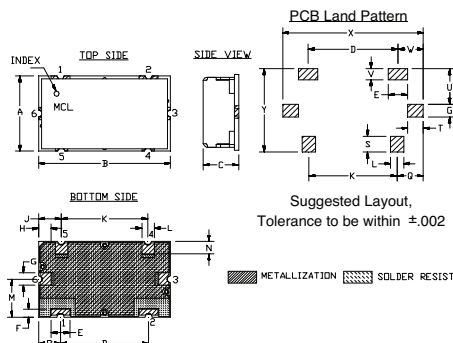
RF Power Input 0.25W Max

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

## Pin Connections

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

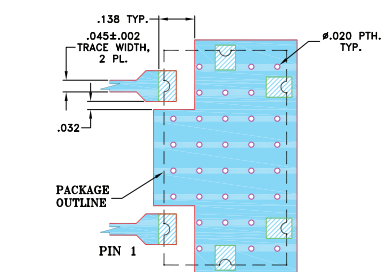
## Outline Drawing



## Outline Dimensions (inch mm)

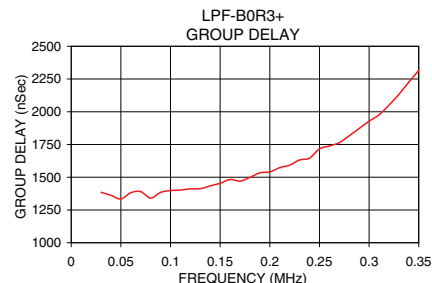
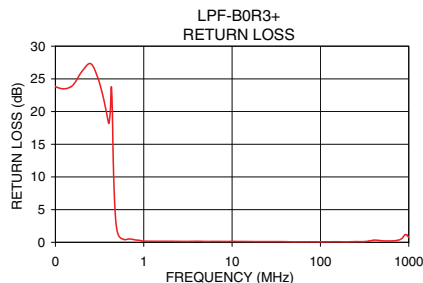
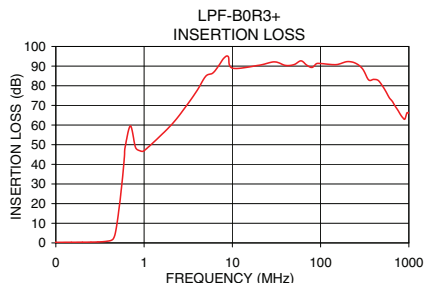
A	B	C	D	E	F	G	H	J	K	L	M
.472"	.826"	.220"	.551"	.118"	.047"	.078"	.076"	.142"	.543"	.078"	.236"
11.99	20.98	5.59	14.00	3.00	1.19	1.98	1.92	3.61	13.79	1.98	5.99
N	P	Q	S	T	U	V	W	X	Y	wt	
.079"	.138"	.162"	.098"	.096"	.217"	.067"	.157"	.866"	.512"	grams	
2.01	3.51	4.11	2.49	2.44	5.51	1.70	3.99	22.00	13.00	6.0	

## 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 SOLDERMASK

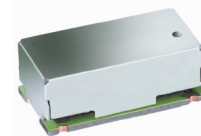


## Features

- high rejection
- good VSWR, 1.1:1 typ. @ passband
- shielded case
- aqueous washable

## Applications

- CDMA
- cellular infrastructure
- wireless communications
- receivers / transmitters



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

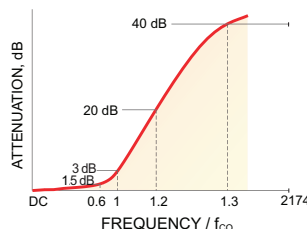
## +RoHS Compliant

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

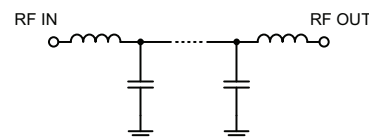
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)	VSWR (:1)
(Loss < 1.5dB)	(Loss 3dB)	(Loss > 20dB) (Loss > 40dB)	Passband Typ. Stopband Typ.
DC - 0.3	0.46	0.56 - 0.61 0.61 - 1000	1.1 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	0.29	0.01	0.03	1384.70
0.10	0.30	0.01	0.04	1361.83
0.20	0.35	0.01	0.06	1382.14
0.25	0.41	0.01	0.08	1341.45
0.30	0.50	0.02	0.10	1398.44
0.40	0.98	0.05	0.12	1411.94
0.44	1.72	0.20	0.14	1434.06
0.46	3.19	0.61	0.16	1482.90
0.48	6.54	1.17	0.18	1498.91
0.51	14.40	1.54	0.20	1541.11
0.56	29.92	1.76	0.22	1592.50
0.61	48.66	2.72	0.24	1646.40
1.00	46.91	0.36	0.25	1716.60
5.00	84.85	4.62	0.27	1764.39
10.00	88.96	3.00	0.29	1872.25
100.00	91.34	5.90	0.30	1928.42
500.00	79.98	7.69	0.32	2050.42
1000.00	66.18	1.40	0.35	2316.43

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