

# Low Pass Filter

# LPF-B0R6+

50Ω DC to 0.6 MHz

## Maximum Ratings

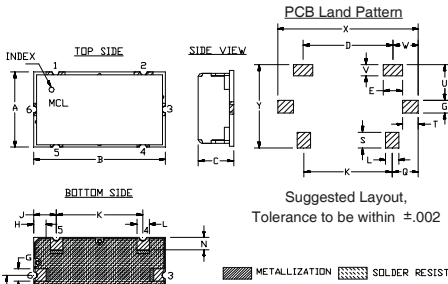
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25W Max

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

## Pin Connections

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

## Outline Drawing

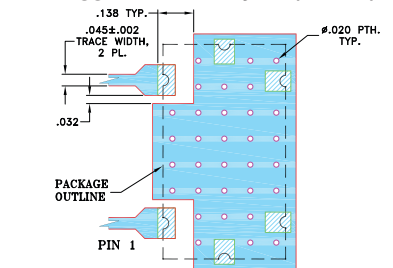


## Outline Dimensions (inch mm)

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	

Note: Please refer to case style drawing for details.

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



## Features

- high rejection
- good VSWR, 1.2:1 typ. @ passband
- shielded case
- aqueous washable

## Applications

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



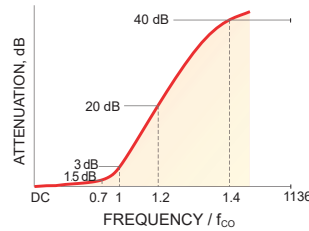
Generic photo used for illustration purposes only  
CASE STYLE: HZ1198

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

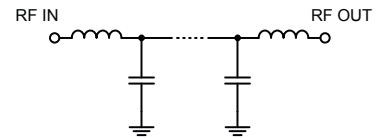
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss < 1.5dB)	(Loss > 20dB)	(Loss > 40dB)	Passband Typ.
DC - 0.6	0.88	1.08 - 1.23	1.23 - 1000	1.2	20

## Typical Frequency Response

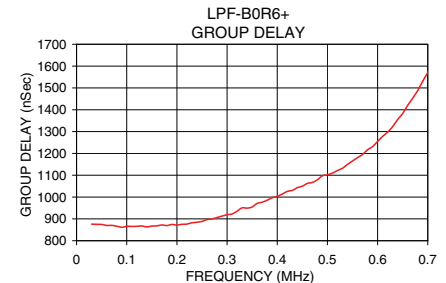
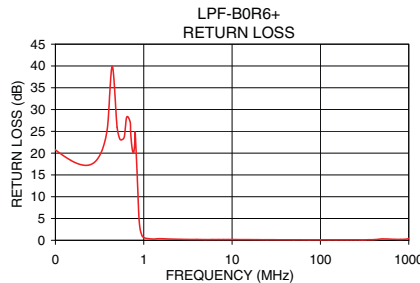
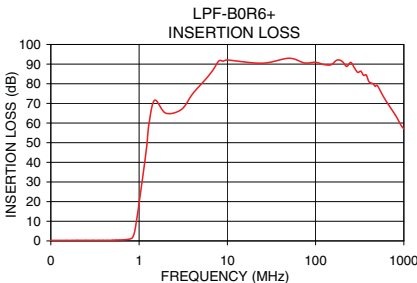


## Functional Schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec.)
	$\bar{x}$	$\sigma$			
0.03	0.23	0.02	28.54	0.03	876.11
0.10	0.26	0.01	20.75	0.05	874.48
0.30	0.31	0.01	18.68	0.10	865.80
0.50	0.38	0.02	25.91	0.20	872.14
0.60	0.49	0.02	23.62	0.25	888.36
0.76	0.85	0.04	20.08	0.28	906.52
0.84	1.63	0.19	15.80	0.30	919.11
0.88	3.73	0.60	5.57	0.34	949.41
0.91	6.91	0.85	2.61	0.36	971.15
0.96	13.72	0.98	0.99	0.40	1002.90
1.04	24.76	0.98	0.50	0.44	1042.92
1.08	30.00	1.00	0.43	0.48	1079.05
1.23	49.62	1.30	0.32	0.52	1121.51
5.00	79.57	2.45	0.17	0.55	1165.29
10.00	92.09	3.23	0.18	0.58	1216.64
100.00	90.93	2.58	0.11	0.60	1254.93
500.00	79.12	5.12	0.33	0.65	1383.05
1000.00	57.11	3.23	0.41	0.70	1571.05



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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