

# Low Pass Filter

# LPF-B0R8+

50Ω DC to 0.8 MHz

## Maximum Ratings

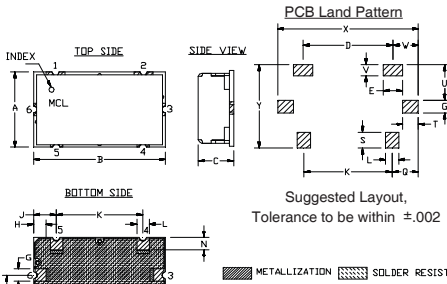
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25W Max

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

## Pin Connections

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

## Outline Drawing

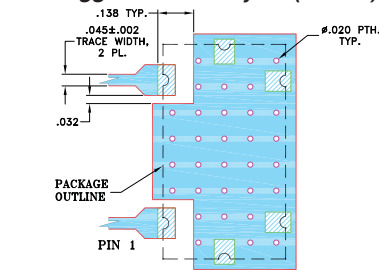


## Outline Dimensions (inch mm)

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, 1.1:1 typ. @ passband
- shielded case
- aqueous washable

## Applications

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



Generic photo used for illustration purposes only  
CASE STYLE: HZ1198

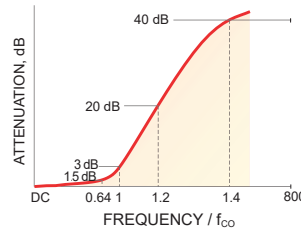
## +RoHS Compliant

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

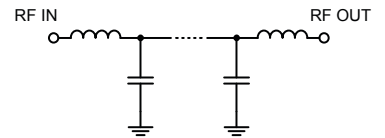
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss < 1.5dB)	(Loss > 20dB)	(Loss > 40dB)	Passband Typ.
DC - 0.8	1.25	1.55 - 1.75	1.75 - 1000	1.1	20

## Typical Frequency Response

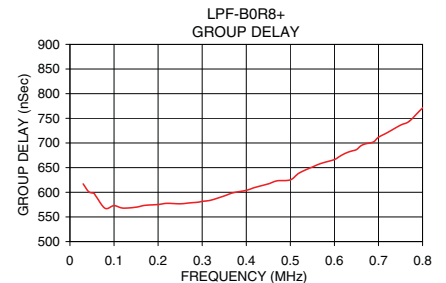
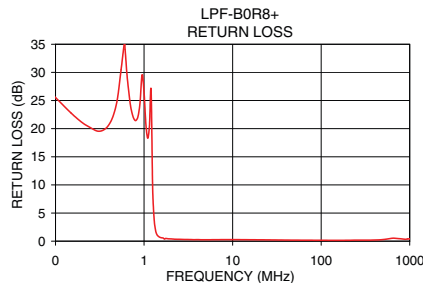
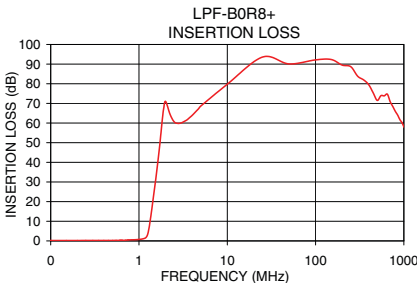


## Functional Schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec.)
	$\bar{x}$	$\sigma$			
0.03	0.16	0.02	32.59	0.03	616.97
0.30	0.24	0.01	19.55	0.04	603.62
0.63	0.29	0.02	31.18	0.05	598.63
0.80	0.52	0.02	21.42	0.06	590.63
1.10	1.04	0.03	18.29	0.08	567.48
1.20	1.74	0.22	26.89	0.10	572.98
1.25	3.19	0.55	9.57	0.15	569.80
1.30	6.62	0.83	3.92	0.20	575.21
1.35	11.38	0.95	1.86	0.25	576.60
1.45	21.66	0.96	0.87	0.30	581.55
1.55	31.62	1.00	0.63	0.35	592.62
1.75	52.28	1.65	0.48	0.40	604.02
4.00	63.88	0.53	0.28	0.50	625.22
10.00	79.78	1.22	0.28	0.55	651.29
100.00	92.14	4.30	0.16	0.60	666.34
500.00	71.51	1.78	0.29	0.63	680.95
800.00	66.00	1.68	0.42	0.70	711.58
1000.00	58.19	1.61	0.40	0.80	770.79



## 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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

