Surface Mount

Low Pass Filter

LPF-B0R35+

50Ω DC to 0.35 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

Features

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

Applications

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

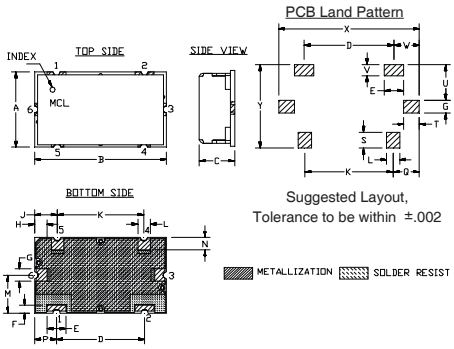
Generic photo used for illustration purposes only

CASE STYLE: HZ1198

+RoHS Compliant

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

Outline Drawing



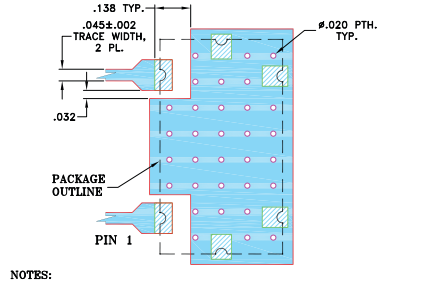
Outline Dimensions (inch / mm)

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)



NOTES:
1. 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.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

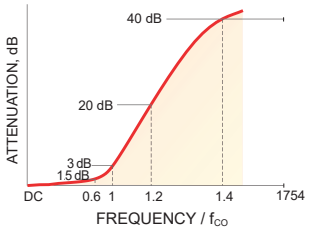
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

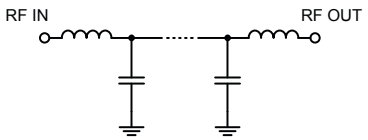
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	fco, MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
				Passband Typ.	Stopband Typ.
(Loss < 1.5dB)	(Loss 3dB)	(Loss > 20dB)	(Loss > 40dB)		
DC - 0.35	0.57	0.70 - 0.79	0.79 - 1000	1.2	20

Typical Frequency Response



Functional Schematic

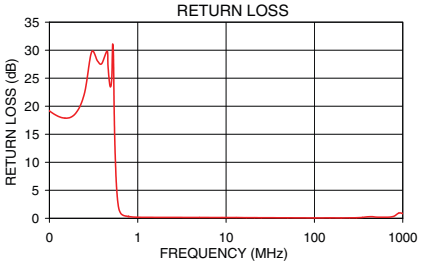


Typical Performance Data at 25°C

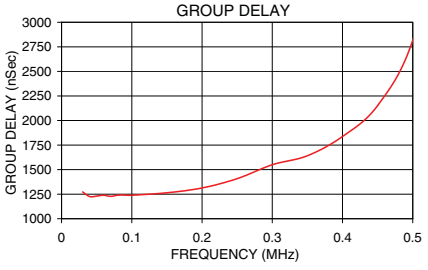
Frequency (MHz)	Insertion Loss (dB) x̄	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec.)
0.03	0.35	0.02	25.99	0.03	1272.71
0.10	0.33	0.01	18.77	0.05	1230.57
0.20	0.35	0.01	18.25	0.07	1227.66
0.30	0.39	0.01	31.07	0.09	1240.17
0.35	0.46	0.01	34.46	0.11	1244.48
0.39	0.54	0.01	32.08	0.13	1249.43
0.54	1.59	0.15	14.88	0.17	1279.00
0.57	3.62	0.56	5.68	0.20	1313.11
0.59	6.54	0.85	2.82	0.23	1366.08
0.62	12.51	1.01	1.20	0.25	1408.28
0.66	21.26	1.04	0.61	0.27	1438.54
0.70	29.95	1.08	0.44	0.30	1549.84
0.79	51.11	1.62	0.29	0.33	1579.06
1.00	64.18	1.23	0.20	0.35	1641.22
5.00	82.63	2.99	0.14	0.37	1695.07
100.00	91.19	6.08	0.07	0.40	1836.86
500.00	80.42	1.93	0.20	0.45	2152.05
1000.00	67.27	1.21	0.91	0.50	2816.55

LPF-B0R35+
INSERTION LOSS

LPF-B0R35+
RETURN LOSS



LPF-B0R35+
GROUP DELAY



Notes

A. 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.
B. 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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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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