

Low Pass Filter

LPF-B0R5+

50Ω DC to 0.5 MHz

Maximum Ratings

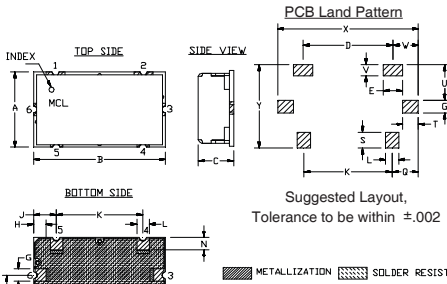
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25W Max

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

Pin Connections

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

Outline Drawing

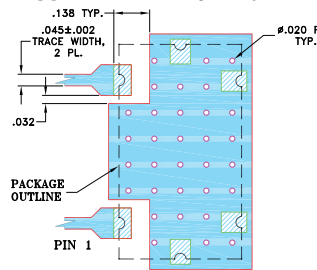


Outline Dimensions (inch mm)

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)



- 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, 1.2:1 typ. @ passband
- shielded case
- aqueous washable

Applications

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



Generic photo used for illustration purposes only
CASE STYLE: HZ1198

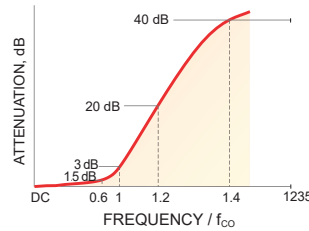
+RoHS Compliant

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

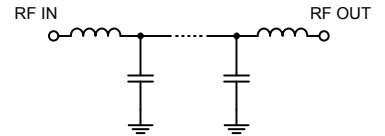
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 0.5	0.81	1.00 - 1.12	1.12 - 1000	1.2	20

Typical Frequency Response

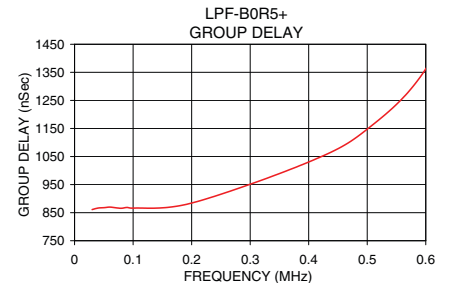
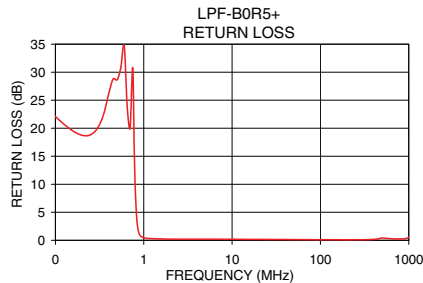
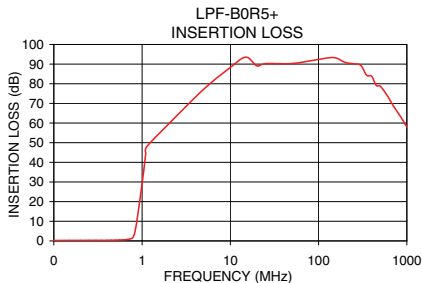


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec.)
	\bar{x}	σ			
0.03	0.23	0.02	29.30	0.03	860.92
0.10	0.25	0.01	22.86	0.05	867.79
0.30	0.29	0.01	20.84	0.08	865.69
0.40	0.32	0.01	26.59	0.12	872.56
0.50	0.40	0.01	27.44	0.16	874.86
0.70	0.83	0.06	18.06	0.20	884.23
0.78	1.56	0.23	15.80	0.24	896.98
0.81	2.90	0.54	7.53	0.28	930.65
0.85	6.94	0.95	2.77	0.32	951.81
0.89	12.71	1.06	1.24	0.36	982.20
0.94	20.32	1.04	0.70	0.40	1030.57
1.00	29.21	1.04	0.47	0.44	1070.15
1.12	47.76	1.42	0.34	0.46	1086.91
5.00	77.20	2.30	0.20	0.48	1111.88
10.00	88.30	3.46	0.18	0.50	1147.45
100.00	92.39	4.26	0.11	0.52	1178.47
500.00	78.70	2.49	0.39	0.55	1235.92
1000.00	58.00	1.21	0.48	0.60	1362.12



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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

