

Low Pass Filter

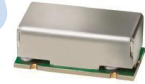
Features

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

Applications

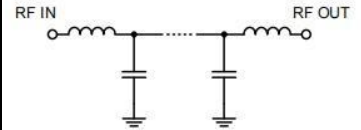
- CDMA
- cellular infrastructure
- wireless communications
- receivers / transmitters

HT-LPF-B0R5+

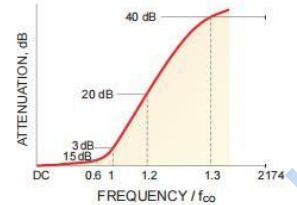


50Ω DC to 0.5 MHz

Functional Schematic



Typical Frequency Response



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

PASSBAND (MHz) (Loss < 1.5dB)	f _{co} (MHz) Nom. (Loss < 3dB)	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 Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	χ	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

Maximum Ratings

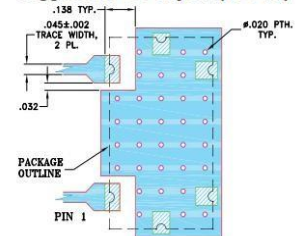
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.25W max.

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

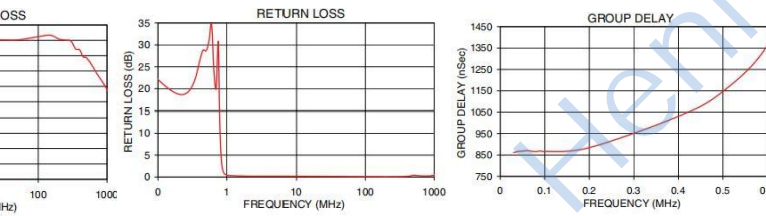
Pin Connections

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

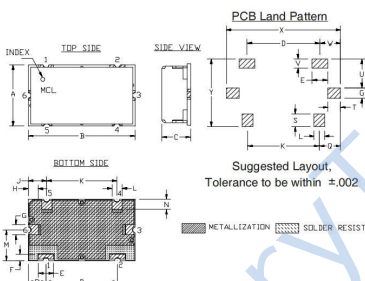
Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS 0.025±0.002". COPPER: 1/2 OZ. EACH SIDE.
 2. FOR OTHER MATERIALS THE TRACE WIDTH MAY NEED TO BE MODIFIED.
 3. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
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Outline Drawing



Outline Dimensions: Unit (mm)

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	S	T	U	V	W	X	Y	WT																						
A	11.99	B	20.98	C	5.59	D	14	E	3	F	1.19	G	1.98	H	1.92	J	3.61	K	13.79	L	1.98	M	5.99	N	2.01	P	3.51	Q	4.11	S	2.49	T	2.44	U	5.51	V	1.70	W	3.99	X	22	WT	6.0	Y	13