

# Low Pass Filter

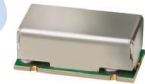
## Features

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

## Applications

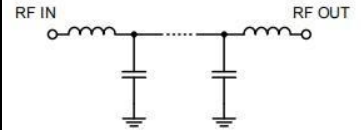
- CDMA
- cellular infrastructure
- wireless communications
- receivers / transmitters

## HT-LPF-B0R7+

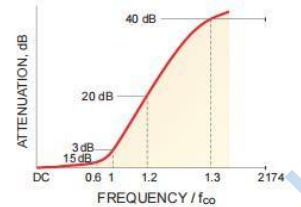


50Ω DC to 0.7 MHz

### Functional Schematic



### Typical Frequency Response



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

PASSBAND (MHz) (Loss < 1.5dB)	f <sub>co</sub> (MHz) Nom. (Loss < 3dB)	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC-0.7	1.08	1.30-1.46	1.46-1000	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	0.15	0.03	34.75	0.03	538.62
0.10	0.17	0.00	32.92	0.05	608.42
0.30	0.20	0.01	36.13	0.10	633.47
0.50	0.30	0.01	20.02	0.20	633.74
0.60	0.39	0.02	16.34	0.30	663.36
0.70	0.48	0.03	15.13	0.35	681.41
0.96	0.85	0.07	23.81	0.40	685.22
1.04	1.83	0.32	15.11	0.45	716.25
1.08	3.57	0.67	7.87	0.50	719.68
1.12	6.81	0.98	3.70	0.55	752.13
1.18	13.39	1.13	1.36	0.60	780.74
1.30	27.77	1.19	0.55	0.65	805.77
1.46	49.02	1.83	0.39	0.70	841.39
5.00	66.53	0.61	0.24	0.75	892.61
10.00	82.33	2.26	0.25	0.80	973.76
100.00	90.40	4.41	0.14	0.85	1086.39
500.00	77.60	1.99	0.20	0.88	1163.22
1000.00	60.51	0.93	0.31	0.90	1198.79

### Maximum Ratings

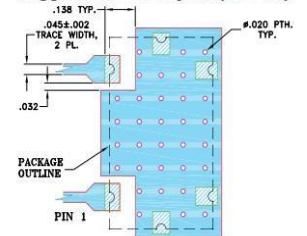
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.25W max.

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

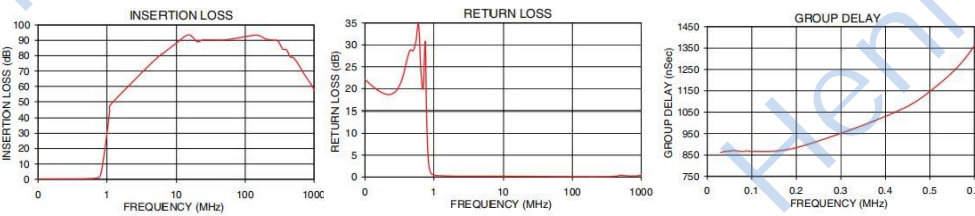
### Pin Connections

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

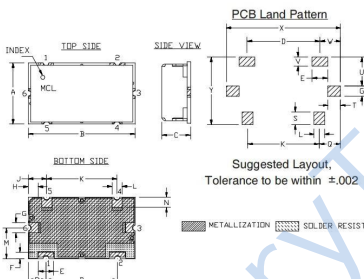
### Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS 0.025±0.002" COPPER: 1/2 OZ. EACH SIDE.  
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



### 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
	11.99	20.98	5.59	14	3	1.19	1.98	1.92	3.61	13.79	1.98	5.99	2.01	3.51	4.11	2.49	2.44	5.51	1.70	3.99	22	13	