

# Low Pass Filter

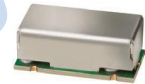
## Features

- high rejection
- good VSWR, 1.1:1 typ. @ passband
- shielded case
- aqueous washable

## Applications

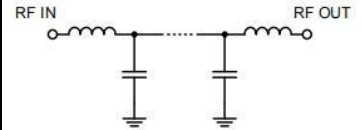
- CDMA
- cellular infrastructure
- wireless communications
- receivers / transmitters

## HT-LPF-B0R3+

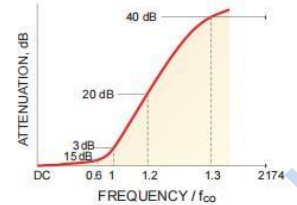


50Ω DC to 0.3 MHz

### 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-0.3	0.46	0.56-0.61	0.61-1000	1.1	20

### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	χ	σ			
0.03	0.29	0.01	28.67	0.03	1384.70
0.10	0.30	0.01	23.82	0.04	1361.83
0.20	0.35	0.01	26.16	0.06	1382.14
0.25	0.41	0.01	27.33	0.08	1341.45
0.30	0.50	0.02	25.27	0.10	1398.44
0.40	0.98	0.05	18.24	0.12	1411.94
0.44	1.72	0.20	20.55	0.14	1432.06
0.46	3.19	0.61	8.72	0.16	1482.90
0.48	6.54	1.17	3.63	0.18	1498.91
0.51	14.40	1.54	1.30	0.20	1541.11
0.56	29.92	1.76	0.57	0.22	1592.50
0.61	48.66	2.72	0.40	0.24	1646.40
1.00	46.91	0.36	0.18	0.25	1716.60
5.00	84.85	4.62	0.13	0.27	1764.39
10.00	88.96	3.00	0.14	0.29	1872.25
100.00	91.34	5.90	0.07	0.30	1928.42
500.00	79.98	7.69	0.23	0.32	2050.42
1000.00	66.18	1.40	0.80	0.35	2316.43

### Maximum Ratings

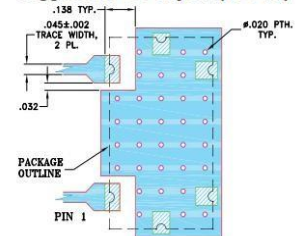
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.25W max.

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

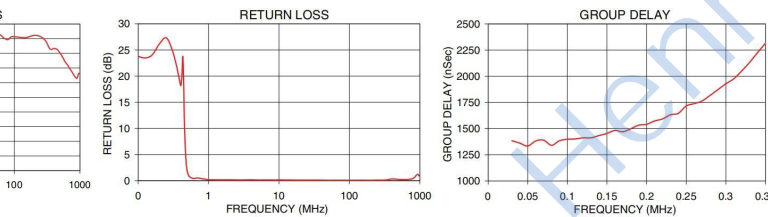
### Pin Connections

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

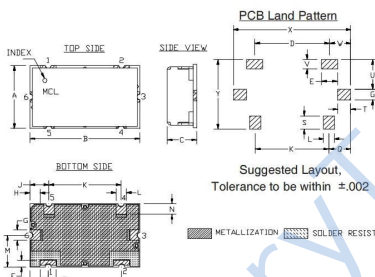
### Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS 0.025±0.002". COPPER: 1/2 OZ. EACH SIDE.
  2. 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	6.0	13