

Bandpass Filter

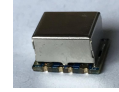
Features

- Excellent rejection
- Good VSWR, 1.1:1 typ. @ Passband

Applications

- Receivers / Transmitters
- PMR / PAMR
- Base station (CDMA 2000)

HT-BPF-B157+



50Ω 151 to 163 MHz

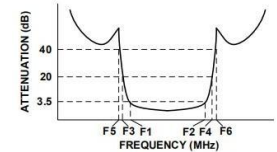
Low Pass Filter Electrical Specifications

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3.5dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)	
		Loss > 20dB		Loss > 40dB		Passband Max.	Stopband Typ.
		F3	F4	F5	F6		
157	151-163	131	187	115 215 - 2000		1.4	30

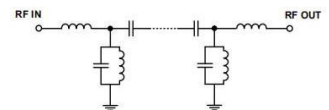
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.0	78.24	2.56	0.39	145.0	50.51
115.0	51.77	0.47	0.19	149.0	44.68
131.0	30.93	0.23	0.52	151.0	40.02
139.0	16.24	0.26	1.65	152.0	38.59
143.0	8.10	0.29	4.44	153.0	37.23
146.0	4.07	0.17	10.70	154.0	36.35
151.0	2.39	0.02	23.36	155.0	35.77
157.0	2.17	0.01	31.79	156.0	35.07
163.0	2.41	0.02	24.54	157.0	35.02
169.0	5.56	0.17	6.25	158.0	34.68
172.0	10.11	0.20	2.90	159.0	34.91
178.0	19.55	0.15	1.23	160.0	35.02
187.0	30.24	0.13	0.68	161.0	35.47
215.0	49.90	0.15	0.30	161.5	35.82
750.0	73.67	2.46	0.13	162.0	36.22
1000.0	72.99	2.35	0.16	163.0	37.63
1500.0	71.66	2.83	0.23	165.0	41.42
2000.0	57.59	0.38	0.25	167.0	44.64

Typical Frequency Response



Functional Schematic

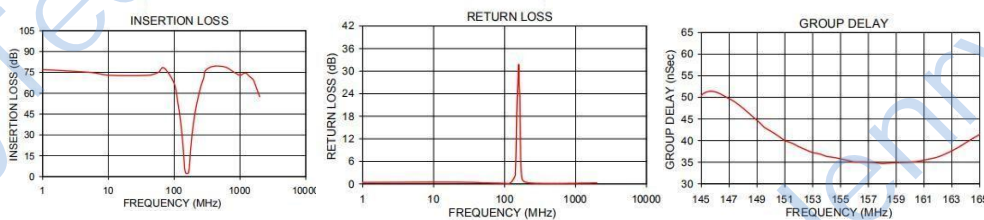


Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

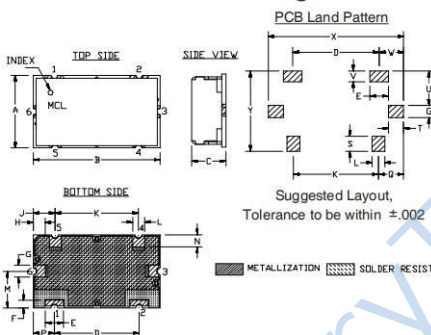
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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



Outline Drawing

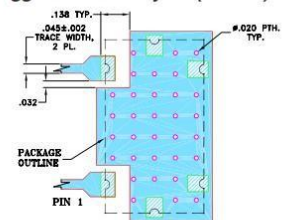


Outline Dimensions (inch/mm)

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:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .0017". .005" COPPER; 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS THE 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