

Bandpass Filter

Features

- good VSWR, 1.3:1 typ @ passband
- high rejection•small size 0.35" X0.35"
- shielded case
- aqueous washable

Applications

- base station
- harmonic rejection
- transmitters/receivers

HT-RBP-173+



50Ω 160 to 185 MHz

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

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 35dB)		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
172.5	160-185	129	230	80	245-1500	1.3	1.8	18

Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

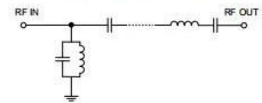
RF Power Input* 0.5 W at 25°C

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

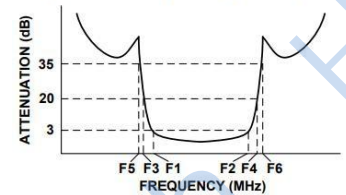
Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.3	102.77	579.06
20	70.70	217.15
80	45.56	78.97
129	33.58	24.14
135	22.36	16.89
142	11.22	7.63
147	5.37	3.21
160	2.37	1.40
172.5	1.93	1.21
185	2.24	1.14
198	5.23	2.77
207	11.55	7.80
220	22.78	19.32
230	31.33	28.96
245	45.94	42.38
700	56.26	78.97
1500	51.03	29.46

Functional Schematic



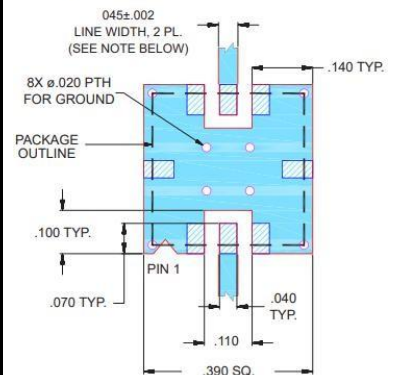
Typical Frequency Response



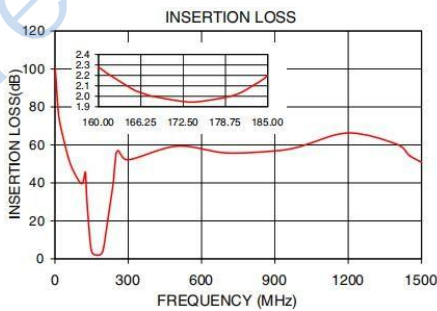
Pad Connections

RF IN	2
RF OUT	6
GROUND	1, 3, 4, 5, 7, 8

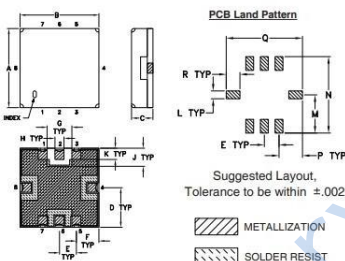
Demo Board MCL P/N: TB-332
Suggested PCB Layout (PL-176)



- NOTES:
1. 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.
 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 SOLDER MASK



Outline Drawing



Outline Dimensions: Unit (mm)

A	8.89	B	8.89	C	2.54
D	4.45	E	1.91	F	2.54
G	2.79	H	1.02	J	2.03
K	1.27	L	1.02	M	4.95
N	9.91	P	3.05	Q	9.91
R	1.78	wt	0.25		