

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-130+



50Ω 95 to 180 MHz

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

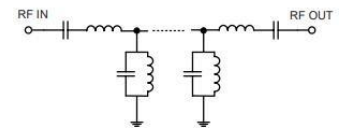
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 35dB)		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
130	95-180	58	260	48	310-2500	1.3	1.9	20

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.25 W at 25°C

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

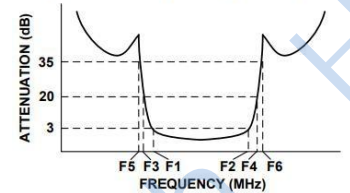
Functional Schematic



Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.5	96.41	1737.18
48	43.71	127.74
58	31.01	63.87
70	15.40	15.81
75	8.88	6.71
80	4.01	2.45
85	2.09	1.22
95	1.40	1.14
110	1.14	1.05
130	1.16	1.39
150	1.20	1.45
180	1.37	1.13
200	4.01	3.23
210	8.44	7.76
230	18.23	22.58
260	29.35	41.37
310	42.28	69.49
2500	49.95	48.26

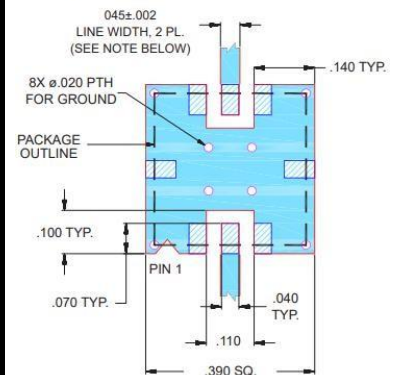
Typical Frequency Response



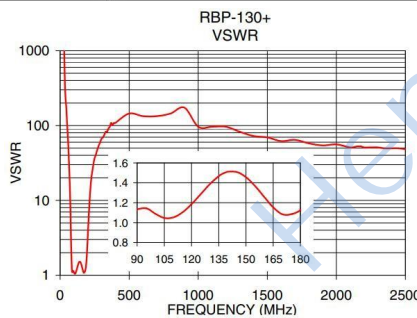
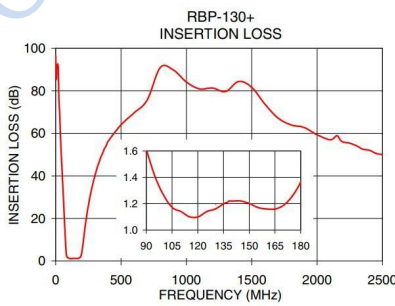
Pad Connections

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

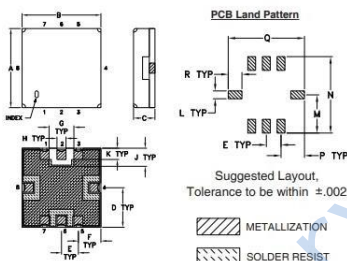
Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



- 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		