

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-135+



50Ω 120 to 150 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
F _c	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
135	120-150	85	210	75	245-2000	1.3	1.8	18

Maximum Ratings

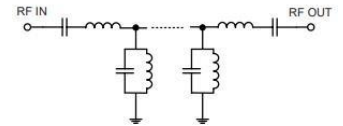
Operating Temperature -40°C to 85°C

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.

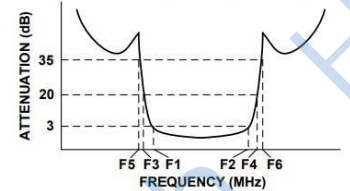
Functional Schematic



Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	90.55	9035.28
40	90.05	868.59
75	45.52	91.43
85	33.18	43.44
95	18.74	14.50
100	10.53	5.47
104	5.28	1.93
120	2.26	1.28
135	2.01	1.09
150	2.28	1.39
170	4.81	2.24
177	9.12	4.79
210	31.97	29.46
245	45.60	56.04
500	74.19	133.63
1000	74.95	72.39
2000	60.33	45.72

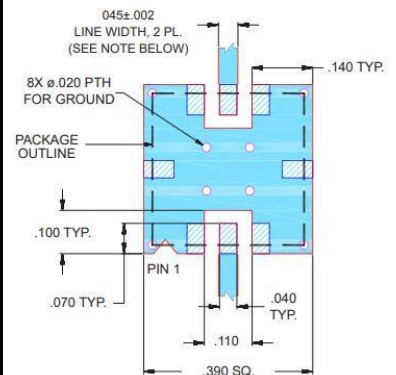
Typical Frequency Response



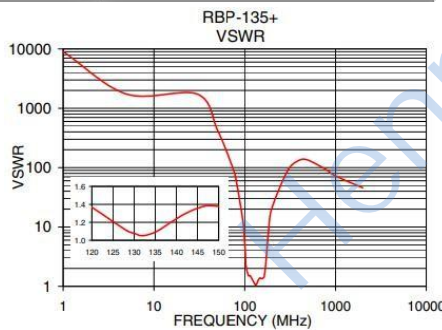
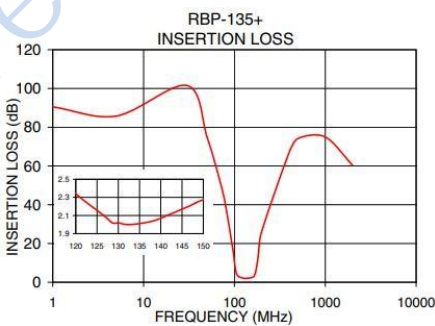
Pad Connections

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

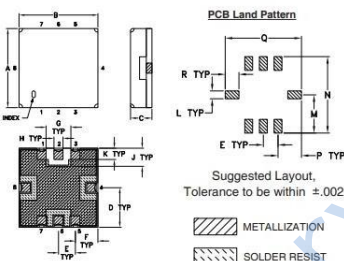
Demo Board MCL P/N: TB-332
Suggested PCB Layout (PL-176)



- 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		