

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-188+



50Ω 138 to 238 MHz

Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	188	—	MHz
	Insertion Loss	F1-F2	138-238	1.80	3.00	dB
	VSWR	F1-F2	138-238	1.38	1.92	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-96	20	27	dB
	VSWR	DC-F3	DC-96	—	20	:1
Stop Band, Upper	Insertion Loss	F4-F5	315-3600	20	25	dB
	VSWR	F4-F5	315-3600	—	20	:1

Maximum Ratings

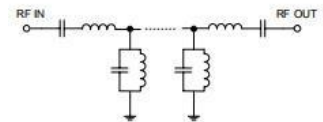
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

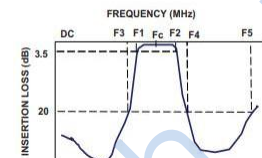
RF Power Input* 0.25W at 25°C

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

Functional Schematic



Typical Frequency Response



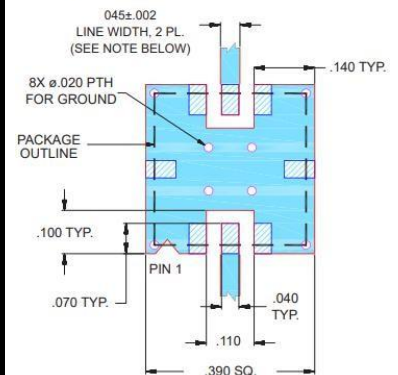
Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	90.54	17371.78
70	50.37	144.77
92	31.06	48.26
96	27.49	38.61
104	20.16	22.00
112	12.69	10.62
120	6.15	4.01
126	3.28	2.04
138	1.70	1.16
188	1.32	1.34
238	1.73	1.26
252	3.14	2.20
263	6.73	5.27
278	13.48	13.60
296	20.81	24.48
315	27.14	34.07
325	30.00	37.77
500	55.97	72.39
2000	75.06	31.60
3600	38.61	28.96

Pad Connections

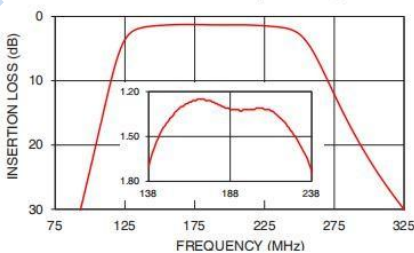
RF IN	2
RF OUT	6
GROUND	1, 3, 4, 5, 7, 8

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

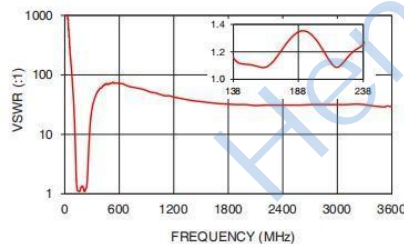


- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

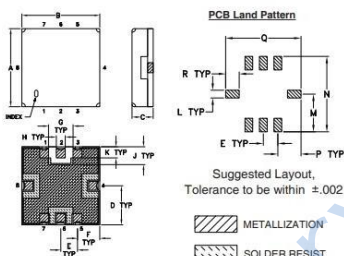
INSERTION LOSS (Pass band)



VSWR



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		