

Bandpass Filter

Features

- good VSWR, 1.3:1 typ @ passband
- high rejection•small size 8.89" X 8.89"
- shielded case
- aqueous washable

Applications

- military radar
- harmonic rejection
- transmitters/receivers

HT-RBP-75+



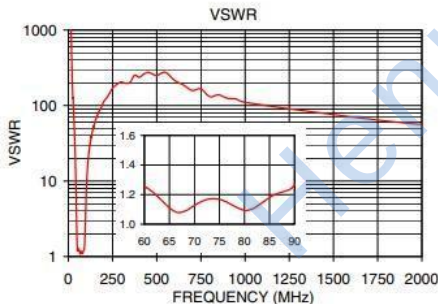
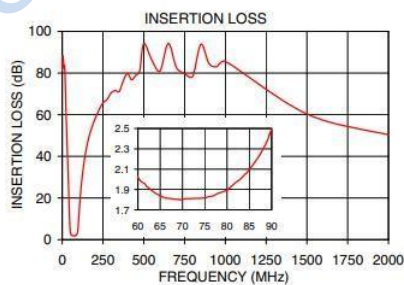
50Ω 60 to 90 MHz

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

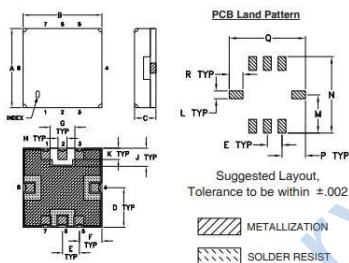
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 35dB)		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
75	60-90	37	122	30	155-2000	1.3	1.7	18

Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.5	81.04	10825.01
28	50.32	99.37
37	29.43	29.34
43	14.77	8.67
46.5	7.36	2.96
50	3.52	1.36
60	2.02	1.25
70	1.81	1.13
75	1.82	1.17
80	1.89	1.09
90	2.50	1.27
95	4.21	2.21
100	8.84	5.56
105	14.58	10.93
122	29.82	30.01
173	51.75	83.61
500	94.19	250.42
2000	50.37	55.92



Outline Drawing



Outline Dimensions: Unit (mm)

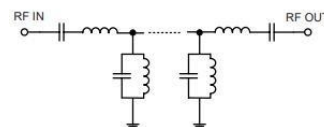
A	8.89	B	8.89	C	2.54
D	4.45	E	1.91	F	2.54
G	2.79	H	1.02	J	2.03
K	1.27	L	1.02	M	4.95
N	9.91	P	3.05	Q	9.91
R	1.78	wt	0.25		

Maximum Ratings

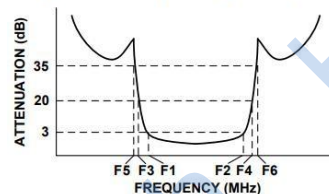
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.1W max.

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

Functional Schematic



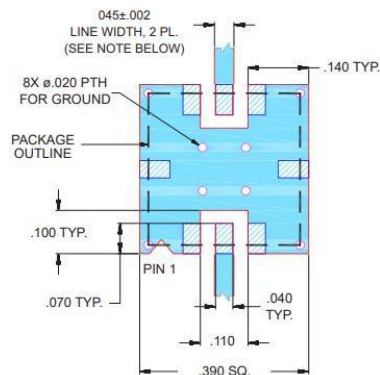
Typical Frequency Response



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