

Bandpass Filter

Features

- good VSWR, 1.5:1 typ. @ passband
- small size 8.89" x 8.89"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- navigation

HT-RBP-650+



50Ω 624 to 680 MHz

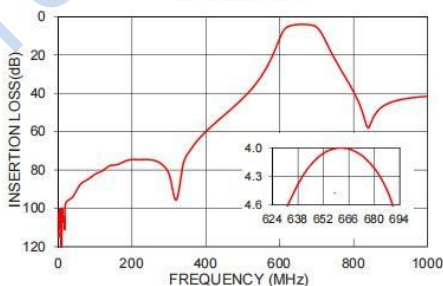
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

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.
652	624-680	550	760	520	810-1000	1.5	-	18

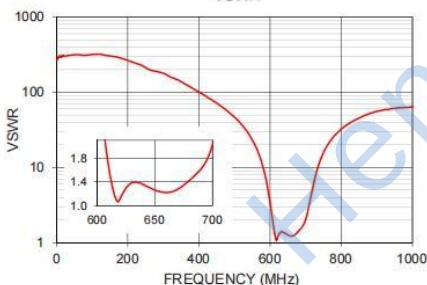
Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	113.30	269.77
200	74.50	266.10
500	42.61	46.62
520	38.59	37.21
550	31.13	23.35
580	20.57	10.30
590	16.05	6.51
610	7.39	1.63
624	5.10	1.27
650	4.09	1.26
652	4.06	1.25
680	4.21	1.43
710	7.72	3.19
730	15.04	8.55
760	25.93	19.29
770	29.21	22.80
810	43.00	38.85
1000	41.53	64.23

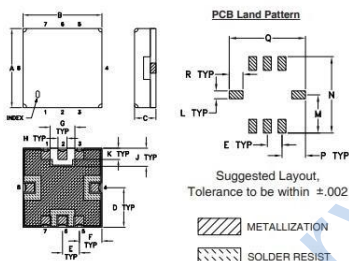
INSERTION LOSS



VSWR



Outline Drawing



Outline Dimensions: Unit (mm)

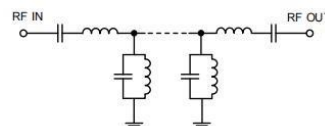
A	8.89	B	8.89	C	2.54
D	4.45	E	1.91	F	2.54
G	2.79	H	1.02	J	2.03
K	1.27	L	1.02	M	4.95
N	9.91	P	3.05	Q	9.91
R	1.78	wt	0.25		

Maximum Ratings

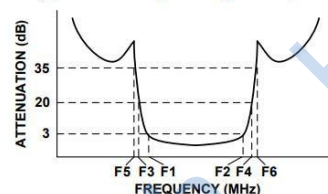
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5 W at 25°C

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

Functional Schematic



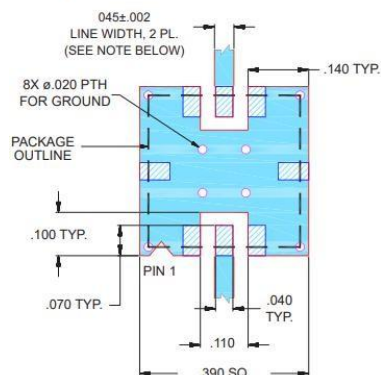
Typical Frequency Response



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