

Bandpass Filter

Features

- linear phase, up to $\pm 8\text{deg}$ typ. @ $F_c \pm 43\text{MHz}$
- good VSWR, 1.2:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- navigation

HT-RBP-263+



50Ω 230 to 297 MHz

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

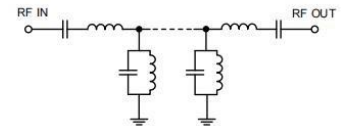
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 35dB)		Passband		Stopband
F _c	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
263.5	230-297	140	360	80	500-1000	1.5	1.7	18

Maximum Ratings

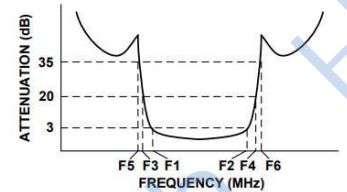
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5 W at 25°C

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

Functional Schematic



Typical Frequency Response



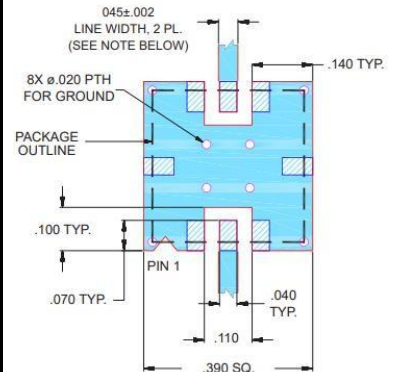
Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.0	99.02	579.06
10.0	75.88	289.53
80.0	41.13	96.51
120.0	31.89	59.91
140.0	27.77	43.44
200.0	9.98	3.48
220.5	2.35	2.04
230.0	1.47	1.40
263.5	1.12	1.17
297.0	1.63	1.12
306.5	2.66	1.81
325	9.58	7.94
350	23.83	27.59
360	30.23	34.75
400	40.61	54.29
500	41.00	72.39
1000	56.91	82.73

Pad Connections

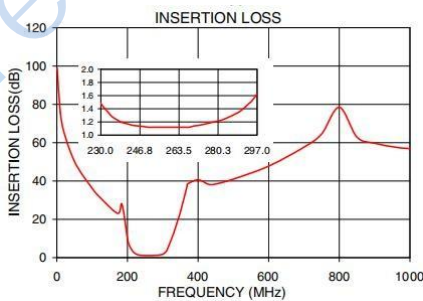
RF IN	2
RF OUT	6
GROUND	1, 3, 4, 5, 7, 8

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

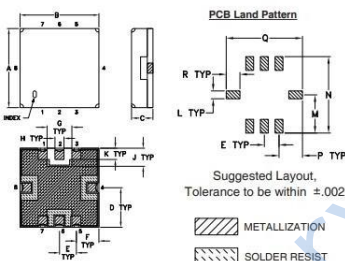


- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

 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		