

Bandpass Filter

RBP-253+

50Ω 186 to 340 MHz

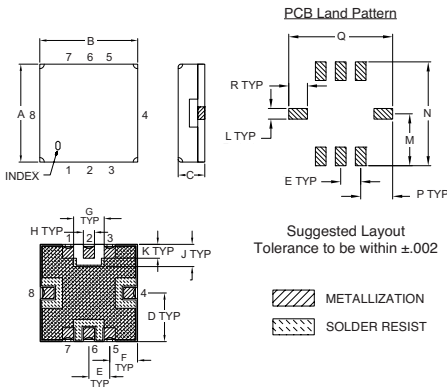
Maximum Ratings

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

Pin Connections

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

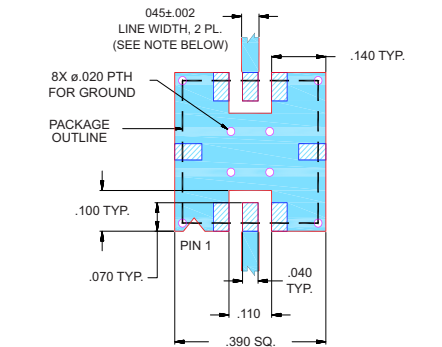
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	WT.	GRAM
.350	.350	.100	.175	.075	.100	.110	.040	.080		
8.89	8.89	2.54	4.45	1.93	2.54	2.79	1.02	2.03		
K	L	M	N	P	Q	R				
.050	.040	.195	.390	.120	.390	.070				
1.27	1.02	4.95	9.91	3.05	9.91	1.78				

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



- NOTES:
- 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.
 - 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

Features

- Good VSWR, 1.7:1 Typ @ Passband
- Small Size (0.35" X 0.35")
- Shielded case
- Aqueous washable

Applications

- Navigation
- Harmonic Rejection
- Transmitters/Receivers



CASE STYLE: GP731
PRICE: \$15.95 ea. QTY (1-9)

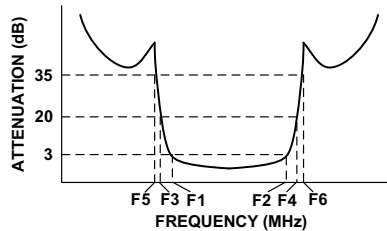
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

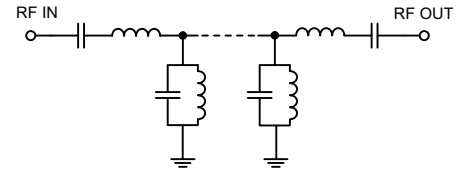
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 35dB		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
253	186 - 340	140	440	120	500 - 3000	1.7	2.1	18

Typical Frequency Response



Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.3	97.50	1737.18
50.0	81.95	868.59
120.0	41.47	133.63
140.0	28.14	54.29
163.0	10.51	9.53
170.0	5.40	3.68
186.0	1.82	1.47
253.0	1.17	1.34
263.0	1.28	1.52
300.0	1.35	1.51
340.0	1.82	1.45
345.0	2.16	1.69
362.0	5.38	4.23
380.0	11.59	11.61
440.0	29.39	43.44
500.0	40.20	72.39
2000.0	78.34	59.91
3000.0	47.45	45.72

