

# Bandpass Filter

## RBP-263+

50Ω 230 to 297 MHz

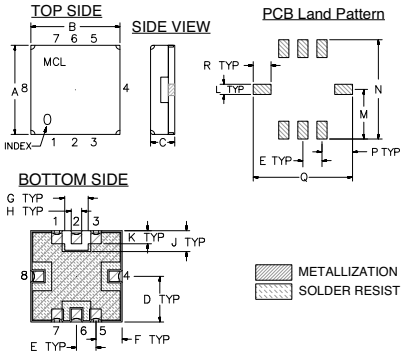
### Maximum Ratings

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

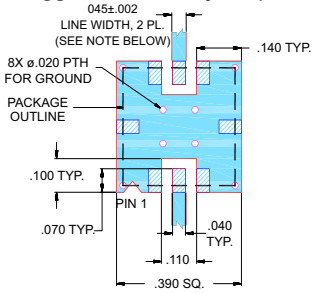
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.090	.040	.080
8.89	8.89	2.54	4.45	1.93	2.54	2.29	1.02	2.03
K	L	M	N	P	Q	R	wt.	
.050	.040	.195	.390	.120	.390	.070	grams	
1.27	1.02	4.95	9.91	3.05	9.91	1.78		0.25

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



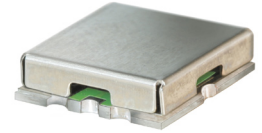
- NOTES: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.  
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
DENOTES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

### Features

- Linear Phase, up to ± 8 deg. Typ @ Fc ± 43 MHz
- Good VSWR, 1.2:1 Typ @ Pass Band
- Small Size (0.35" X 0.35")

### Applications

- Navigation
- Harmonic Rejection
- Transmitters/Receivers



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

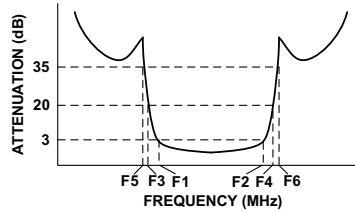
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

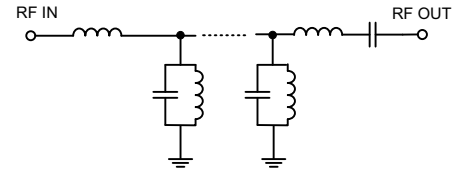
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)	
		Loss > 20dB	Loss > 35dB	F3	F4		F5	F6
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 43MHz	Max.	Typ.
263.5	230 - 297	140	360	80	500-1000	±12	1.7	18

### Typical Frequency Response

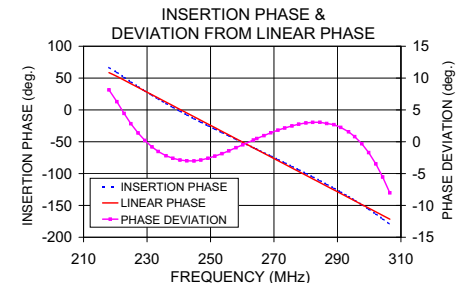
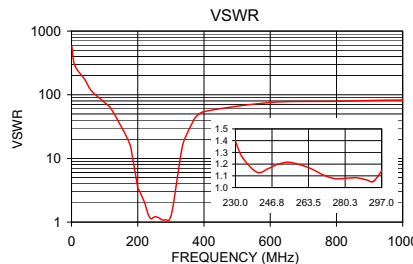


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg.)
1.0	99.02	579.06	220.5	6.30
10.0	75.88	289.53	224.0	2.83
80.0	41.13	96.51	230.0	0.21
120.0	31.89	59.91	235.0	-2.20
140.0	27.77	43.44	240.0	-2.87
200.0	9.98	3.48	246.0	-2.87
220.5	2.35	2.04	251.0	-2.26
230.0	1.47	1.40	255.0	-1.43
263.5	1.12	1.17	263.5	0.27
297.0	1.63	1.12	266.0	0.96
306.5	2.66	1.81	271.0	1.82
325.0	9.58	7.94	275.0	2.49
350.0	23.83	27.59	284.0	3.06
360.0	30.23	34.75	291.0	2.26
400.0	40.61	54.29	297.0	-0.32
500.0	41.00	72.39	302.0	-3.47
1000.0	56.91	82.73	306.5	-8.02



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS

REV. B  
M11455  
EDR-8342  
RBP-263+  
RAV  
080113  
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