

# Bandpass Filter

## RBP-415+

50Ω 404 to 426 MHz

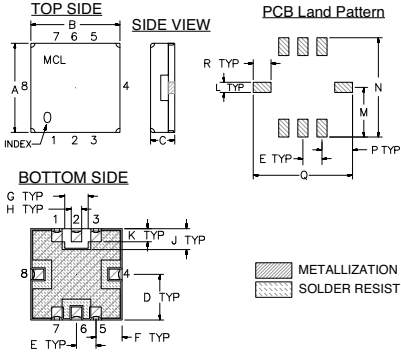
### Maximum Ratings

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

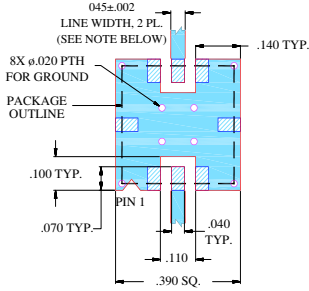
### Outline Drawing



### 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		

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



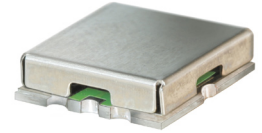
- NOTES: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES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

### Features

- Linear Phase, up to ± 7 deg. Typ @ Fc ± 45 MHz
- Good VSWR, 1.2:1 Typ @ Pass Band
- Small Size (0.35" X 0.35")

### Applications

- CDMA
- Harmonic Rejection
- Transmitters/Receivers



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

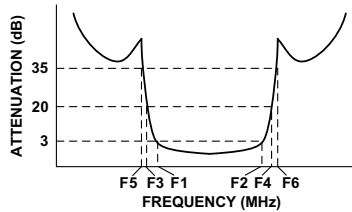
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

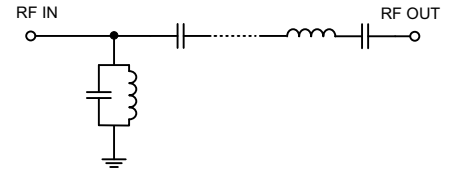
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.) Fc ± 45MHz	VSWR (:1)	
		Loss > 20dB	Loss > 35dB	Passband	Stopband			
Fc	F1 - F2	F3	F4	F5	F6		Max.	Typ.
415	404 - 426	225	550	120	750-2000	±10	1.7	18

### Typical Frequency Response

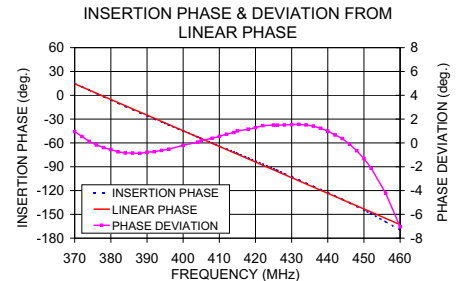
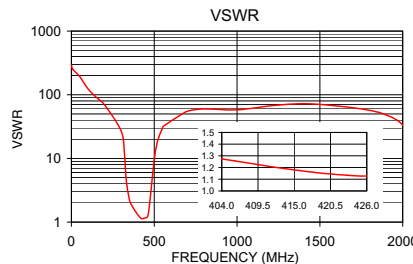
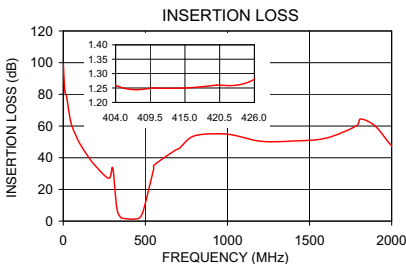


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg)
0.3	99.29	289.53	370.0	0.95
50.0	61.00	193.02	374.0	0.13
120.0	45.73	108.58	380.0	-0.56
225.0	31.41	59.91	386.0	-0.85
318.0	15.95	13.81	390.0	-0.78
328.0	7.41	5.85	396.0	-0.53
340.0	3.23	2.65	404.0	0.06
404.0	1.26	1.27	410.0	0.55
425.0	1.28	1.13	415.0	1.01
426.0	1.28	1.13	422.0	1.45
475.0	3.35	2.24	426.0	1.49
490.0	7.48	5.59	436.0	1.41
510.0	15.50	13.92	440.0	0.99
550.0	32.64	29.96	446.0	-0.11
750.0	49.35	53.46	450.0	-1.32
900.0	66.98	57.91	456.0	-4.22
2000.0	47.47	33.42	460.0	-7.04



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

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