

# Bandpass Filter

50Ω 160 to 185 MHz

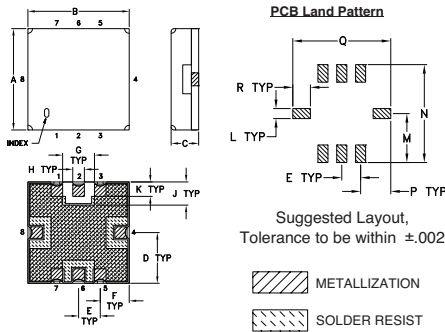
## Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W at 25°C
Permanent damage may occur if any of these limits are exceeded.	

## Pin Connections

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

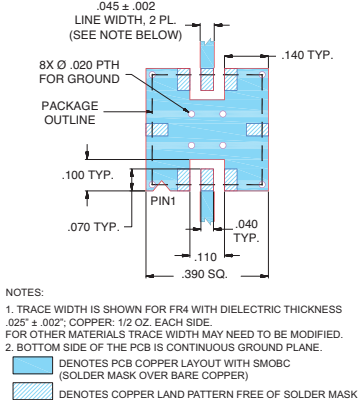
## Outline Drawing



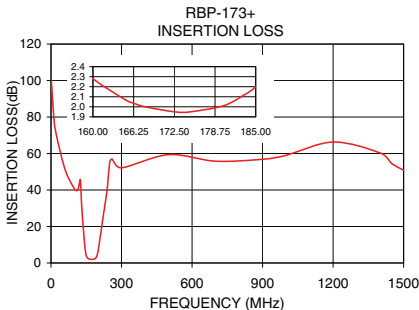
## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.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	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 ±4 deg typ. @ Fc ±15MHz
- good VSWR, 1.2:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

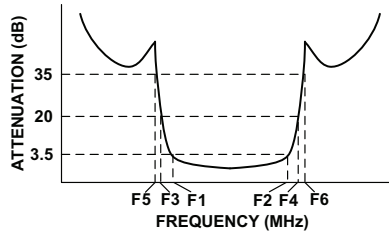
## Applications

- harmonic rejection
- transmitters / receivers
- WiMAX

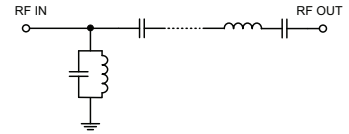
## Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3.5dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)	
		Loss > 20dB	Loss > 35dB				Passband	Stopband
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 15MHz	Max.	Typ.
172.5	160 - 185	129	230	80	245-1500	±10	1.8	18

## Typical Frequency Response

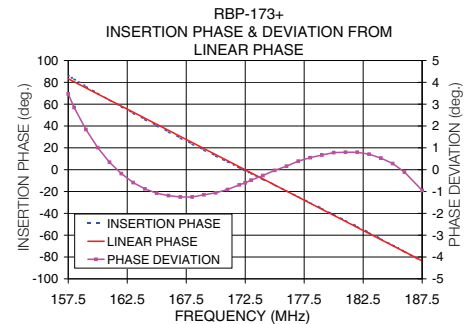
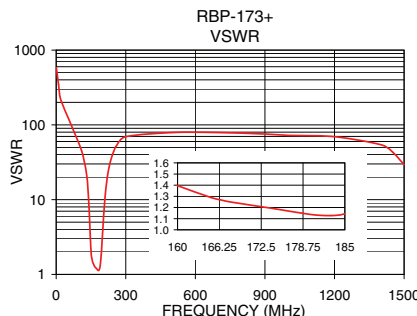


## Functional Schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg)
0.3	102.77	579.06	157.5	3.47
20.0	70.70	217.15	159.0	1.84
80.0	45.56	78.97	160.0	1.01
129.0	33.58	24.14	162.0	-0.18
135.0	22.36	16.89	164.0	-0.88
142.0	11.22	7.63	166.0	-1.19
147.0	5.37	3.21	168.0	-1.25
160.0	2.37	1.40	170.0	-1.06
172.5	1.93	1.21	172.5	-0.60
185.0	2.24	1.14	175.0	-0.03
198.0	5.23	2.77	177.0	0.39
207.0	11.55	7.80	179.0	0.67
220.0	22.78	19.32	181.0	0.80
230.0	31.33	28.96	183.0	0.71
245.0	45.94	42.38	185.0	0.28
700.0	56.26	78.97	186.0	-0.11
1500.0	51.03	29.46	187.5	-0.95



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IF/RF MICROWAVE COMPONENTS

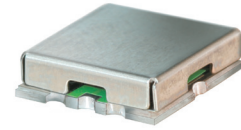
For detailed performance specs & shopping online see web site

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# RBP-173+



CASE STYLE: GP731  
PRICE: \$13.70 ea. QTY (10)

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