

Bandpass Filter

RBP-160+

50Ω 120 to 210 MHz

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.

Pin Connections

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

Features

- high rejection
- good VSWR, 1.2:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- navigation



Generic photo used for illustration purposes only
CASE STYLE: GP731

+RoHS Compliant

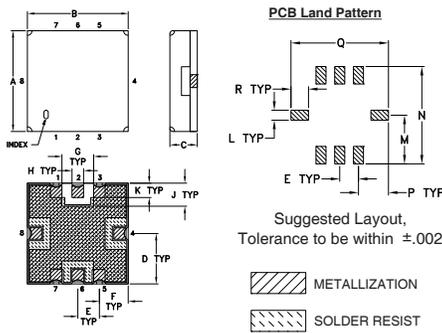
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200
13"	500, 1000

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

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)	
		Loss > 20dB F3 F4	Loss > 35dB F5 F6	Passband Max.	Stopband Typ.		
165	120 - 210	85 280	70 340 - 2000	1.6	18		

Outline Drawing

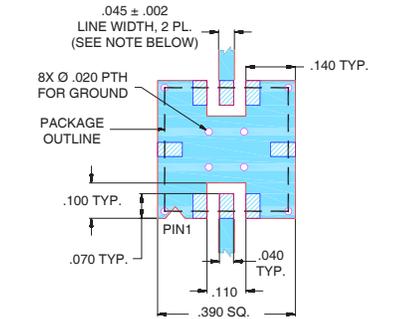


Outline Dimensions (inch/mm)

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	1.91	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

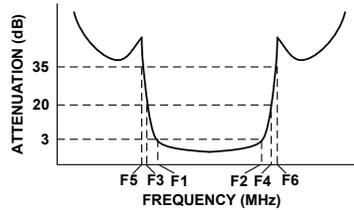
Note: Please refer to case style drawing for details

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

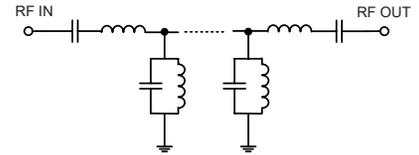


- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - ▨ DENOTES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

Typical Frequency Response



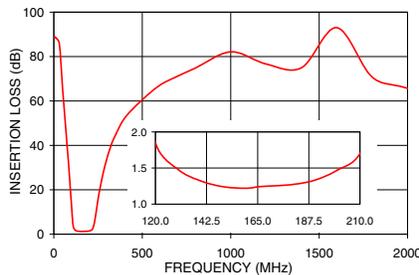
Functional Schematic



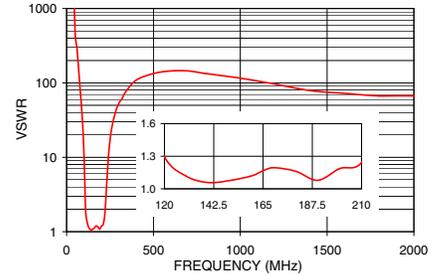
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.3	89.19	1737.18
40	77.22	1737.18
70	44.89	144.77
85	29.73	51.10
100	12.83	11.03
105	7.19	4.62
110	3.46	1.85
120	1.85	1.29
165	1.24	1.17
210	1.70	1.24
220	2.49	1.72
230	5.47	4.08
250	15.72	17.05
280	27.86	39.49
340	43.18	75.53
1000	82.13	115.81
1400	74.97	78.97
2000	65.68	66.82

RBP-160+ INSERTION LOSS



RBP-160+ VSWR



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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