

Bandpass Filter

RBP-75+

50Ω 60 to 90 MHz

Maximum Ratings

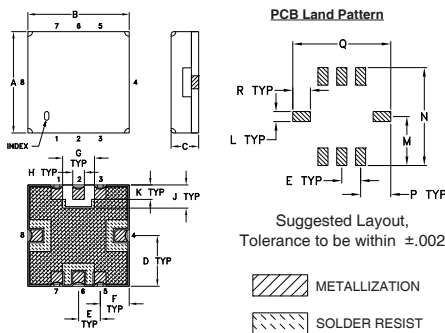
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.1W at 25°C

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

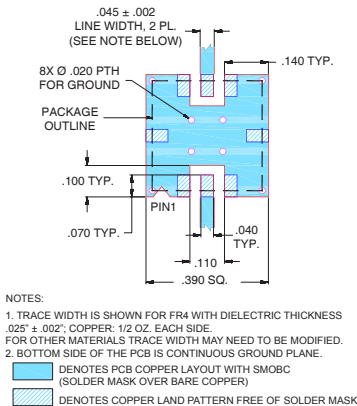
Outline Drawing



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		
.050	.040	.195	.390	.120	.390	.070		
1.27	1.02	4.95	9.91	3.05	9.91	1.78		
								grams
								0.25

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



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-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- linear phase, up to ± 4 deg. typ @ $F_c \pm 15$ MHz
- good VSWR, 1.3:1 typ @ passband
- high rejection
- small size 0.35" X 0.35"
- shielded case
- aqueous washable

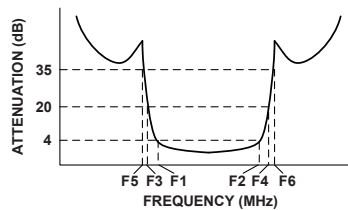
Applications

- military radar
- harmonic rejection
- transmitters/receivers

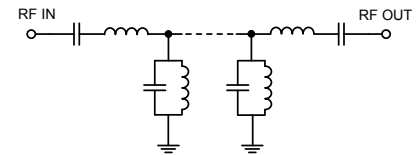
Bandpass Filter Electrical Specifications ($T_{AMB} = 25^\circ\text{C}$)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.) $F_c \pm 15$ MHz	VSWR (:1)	
		Loss > 20dB	Loss > 35dB				Passband	Stopband
F_c	$F_1 - F_2$	F_3	F_4	F_5	F_6		Typ. Max.	Typ.
75	60 - 90	37	122	30	155 - 2000	±8	1.3 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.)
0.5	81.04	10825.01	60.0	4.61
28.0	50.32	99.37	62.0	1.92
37.0	29.43	29.94	64.0	0.11
43.0	14.77	8.67	66.0	-1.04
46.5	7.36	2.96	68.0	-1.69
50.0	3.52	1.36	70.0	-1.86
60.0	2.02	1.25	71.0	-1.82
70.0	1.81	1.13	73.0	-1.49
75.0	1.82	1.17	74.0	-1.25
80.0	1.89	1.09	75.0	-0.97
90.0	2.50	1.27	76.0	-0.68
95.0	4.21	2.21	78.0	-0.07
100.0	8.84	5.56	80.0	0.49
105.0	14.58	10.93	82.0	0.97
122.0	29.82	30.01	84.0	1.22
173.0	51.75	83.61	86.0	1.15
500.0	94.19	250.42	88.0	0.44
2000.0	50.37	55.92	90.0	-0.76

