

# Bandpass Filter

## RBP-135+

50Ω 120 to 150 MHz

### Maximum Ratings

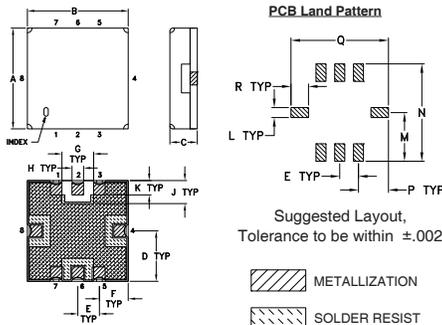
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W at 25°C

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



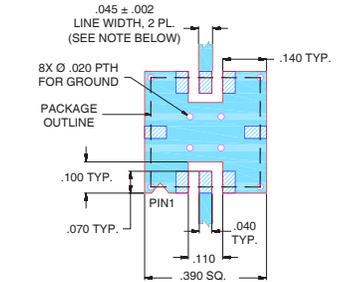
### Outline Dimensions (inch/mm)

	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	1.91	2.54	2.79	1.02	2.03
	K	L	M	N	P	Q	R	wt	
	.050	.040	.195	.390	.120	.390	.070		
	1.27	1.02	4.95	9.91	3.05	9.91	1.78		
								grams	
								0.25	

Note: Please refer to case style drawing for details

### Demo Board MCL P/N: TB-332

### Suggested PCB Layout (PL-176)



### Features

- high rejection
- linear phase, up to ±6deg typ. @ Fc ±15MHz
- good VSWR, 1.3:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

### Applications

- harmonic rejection
- transmitters / receivers
- base station



Generic photo used for illustration purposes only

CASE STYLE: GP731

### +RoHS Compliant

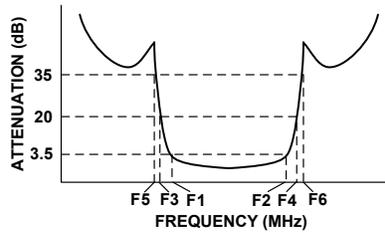
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



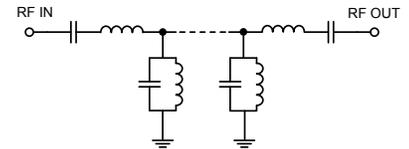
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3.5dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
		Loss > 20dB	Loss > 35dB	F3	F4		Passband	Stopband	
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 15MHz	Typ.	Max.	Typ.
135	120 - 150	85	210	75	245-2000	±12	1.3	1.8	18

### Typical Frequency Response

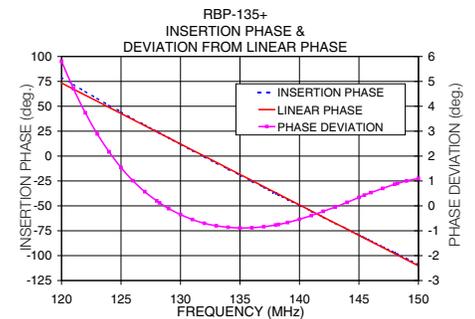
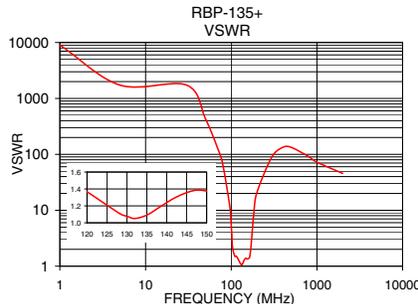
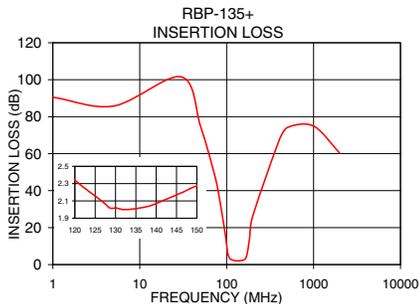


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg)
1.0	90.55	9035.28	120.0	5.81
40.0	90.05	868.59	122.0	3.74
75.0	45.52	91.43	123.0	2.89
85.0	33.18	43.44	125.0	1.54
95.0	18.74	14.50	127.0	0.57
100.0	10.53	5.47	129.0	-0.11
104.0	5.28	1.93	130.0	-0.35
120.0	2.26	1.28	131.0	-0.55
135.0	2.01	1.09	133.0	-0.80
150.0	2.28	1.39	135.0	-0.89
170.0	4.81	2.24	137.0	-0.84
177.0	9.12	4.79	140.0	-0.54
210.0	31.97	29.46	143.0	-0.05
245.0	45.60	56.04	145.0	0.34
500.0	74.19	133.63	147.0	0.70
1000.0	74.95	72.39	149.0	1.00
2000.0	60.33	45.72	150.0	1.10



### 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.
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