

Bandpass Filter

50Ω 120 to 150 MHz

Maximum Ratings

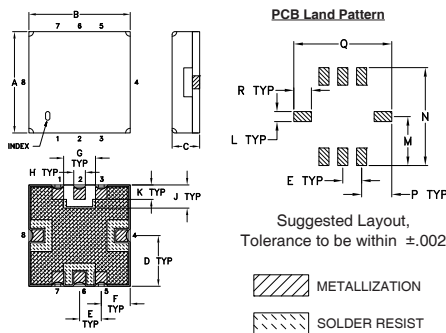
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W at 25°C

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



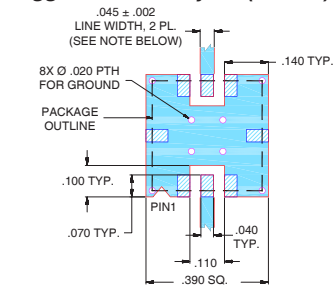
Outline Dimensions (inch/mm)

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	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

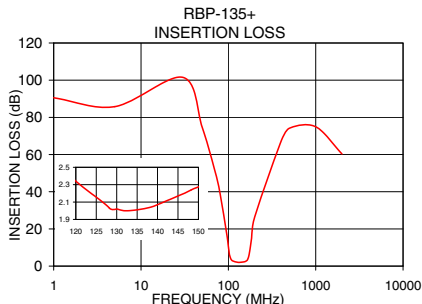
Demo Board MCL P/N: TB-332

Suggested PCB Layout (PL-176)



NOTES:

- 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.
 - 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

- 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

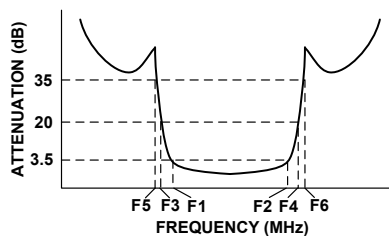
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

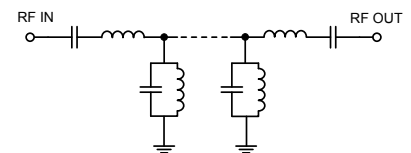
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

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

Typical Frequency Response

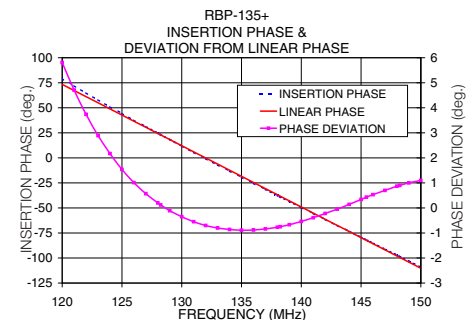
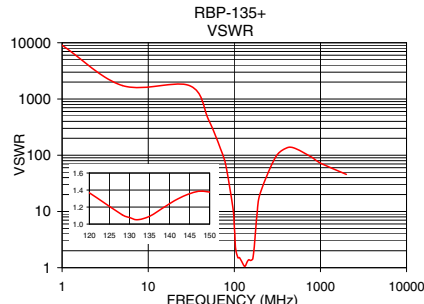


Functional Schematic



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.
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