

Bandpass Filter

50Ω 230 to 297 MHz

Maximum Ratings

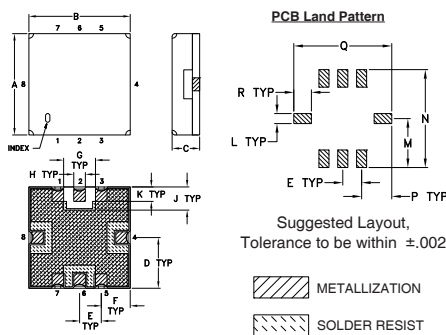
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W at 25°C

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

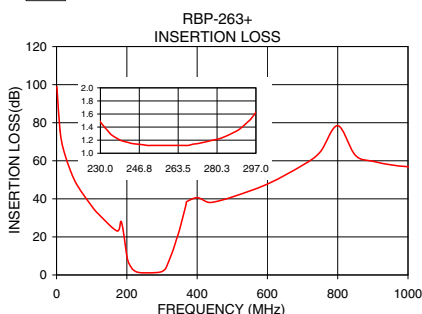
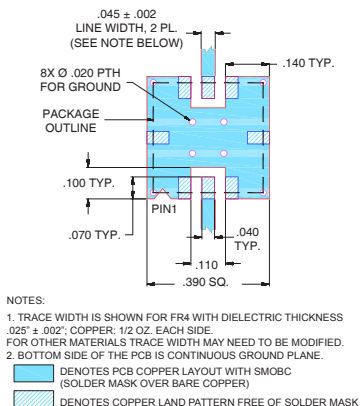
Outline Drawing



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

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. 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 $\pm 8^\circ$ typ. @ $F_c \pm 43$ MHz
- good VSWR, 1.2:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- navigation



CASE STYLE: GP731

+RoHS Compliant

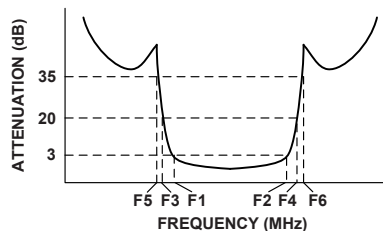
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

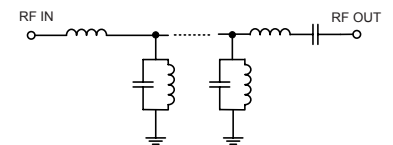
Bandpass Filter Electrical Specifications ($T_{AMB} = 25^\circ\text{C}$)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 3dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)	
		Loss > 20dB		Loss > 35dB			Passband	Stopband
		F3	F4	F5	F6		Max.	Typ.
Fc	F1 - F2					Fc ± 43MHz		
263.5	230 - 297	140	360	80	500-1000	±12	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)
1.0	99.02	579.06	220.5	6.30
10.0	75.88	289.53	224.0	2.83
80.0	41.13	96.51	230.0	0.21
120.0	31.89	59.91	235.0	-2.20
140.0	27.77	43.44	240.0	-2.87
200.0	9.98	3.48	246.0	-2.87
220.5	2.35	2.04	251.0	-2.26
230.0	1.47	1.40	255.0	-1.43
263.5	1.12	1.17	263.5	0.27
297.0	1.63	1.12	266.0	0.96
306.5	2.66	1.81	271.0	1.82
325.0	9.58	7.94	275.0	2.49
350.0	23.83	27.59	284.0	3.06
360.0	30.23	34.75	291.0	2.26
400.0	40.61	54.29	297.0	-0.32
500.0	41.00	72.39	302.0	-3.47
1000.0	56.91	82.73	306.5	-8.02

