

Low Pass Filter

50Ω DC to 83 MHz

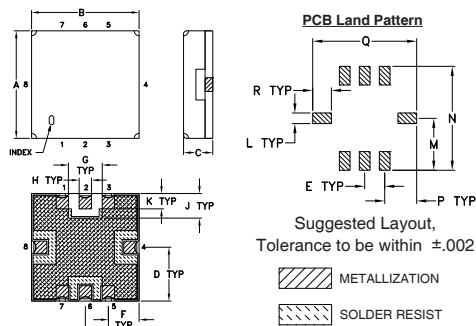
Maximum Ratings

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

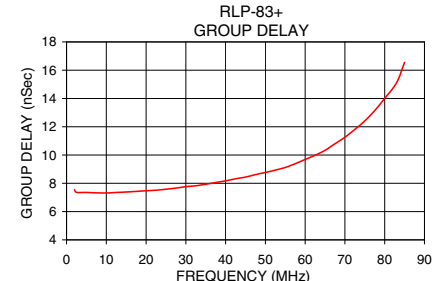
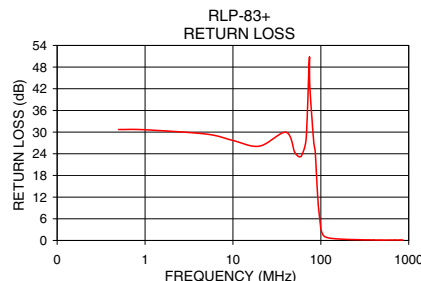
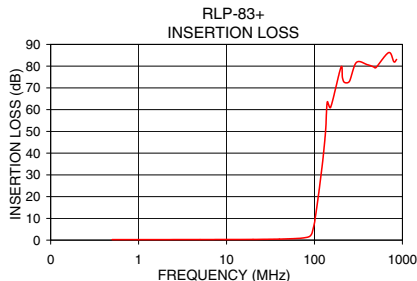
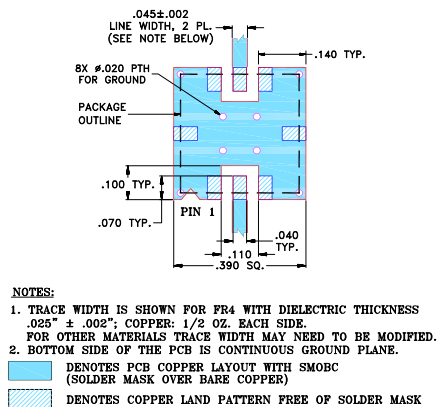


Outline Dimensions (inch/mm)

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

- 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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RLP-83+


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

Features

- high rejection
- sharp insertion loss roll off
- excellent VSWR, 1.1:1 typ. @ passband
- aqueous washable

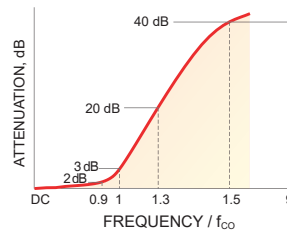
Applications

- wireless communications
- receivers / transmitters

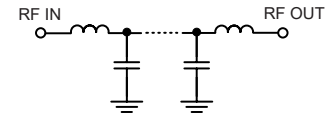
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 83	93	118 - 135	135 - 850	1.1	20

Typical Frequency Response



Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
$\bar{x}$	σ			
0.5	0.25	0.01	2.0	7.55
40.0	0.47	0.01	5.0	7.35
60.0	0.72	0.01	10.0	7.32
83.0	1.32	0.03	15.0	7.39
90.0	2.02	0.10	20.0	7.48
93.0	2.86	0.20	25.0	7.58
94.0	3.29	0.25	30.0	7.77
100.0	7.87	0.50	35.0	7.93
102.0	10.02	0.55	40.0	8.17
110.0	19.47	0.58	45.0	8.44
115.0	25.43	0.59	50.0	8.77
118.0	28.99	0.60	55.0	9.12
135.0	52.69	1.14	60.0	9.69
200.0	79.43	6.12	65.0	10.33
300.0	81.71	4.23	70.0	11.26
500.0	79.32	3.65	75.0	12.41
800.0	82.01	5.38	83.0	15.12
850.0	82.92	5.63	85.0	16.55

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