ow Pass Filter

RLP-50+

DC to 50 MHz 50Ω

Maximum Ratings

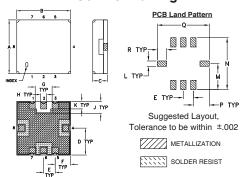
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max

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

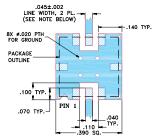


Outline Dimensions (inch)

.350	.350	.100	D .175 4.45	.075	.100	.110	.040	.080
.050	_		N .390			R .070		wt. rams
1.27			9.91					0.25

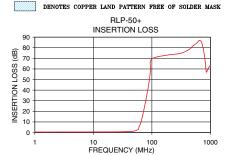
Note: Please refer to case style drawing for details

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



NOTES:

- 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 0Z. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED. 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)



Features

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

Applications

- wireless communications
- receivers / transmitters

Generic photo used for illustration purposes only

CASE STYLE: GP731

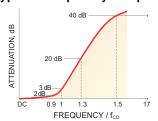
+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



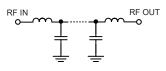
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	fco, MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
(MH2) (Loss < 2dB)	(Loss 3dB)	(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 50	59	78 - 91	91 - 1000	1.1	20

Typical Frequency Response

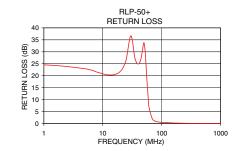


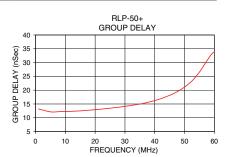
Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	(MHz) (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	x (**	σ	` '	` ,	
0.5	0.52	0.01	24.56	1.0	13.19
20.0	0.64	0.01	21.92	5.0	12.14
40.0	1.00	0.01	24.90	8.0	12.22
50.0	1.40	0.01	33.82	10.0	12.27
56.0	2.06	0.04	18.72	12.0	12.34
59.0	3.06	0.10	10.79	18.0	12.76
61.0	5.48	0.16	7.02	20.0	12.94
65.0	9.55	0.23	3.96	22.0	13.13
70.0	16.59	0.31	1.86	25.0	13.46
75.0	24.42	0.33	1.18	30.0	14.13
78.0	29.07	0.34	0.99	35.0	14.98
91.0	49.88	0.47	0.63	38.0	15.67
97.0	63.18	0.81	0.54	40.0	16.23
100.0	69.26	0.80	0.51	45.0	18.14
200.0	75.27	1.16	0.17	50.0	21.12
400.0	78.87	0.99	0.08	53.0	23.91
700.0	86.84	1.87	0.08	56.0	28.15
1000.0	62.27	0.31	0.10	60.0	33.92





- 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.
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