ow Pass Filter

RLP-70+

DC to 70 MHz 50Ω

Maximum Ratings

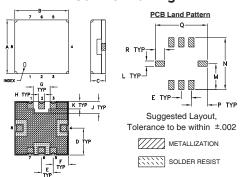
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max

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

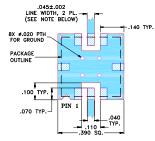
Outline Drawing



Outline Dimensions (inch)

	Н	G	F	Ε	D	С	В	Α
.08	.040	.110	.100	.075	.175	.100	.350	.350
2.0	1.02	2.79	2.54	1.93	4.45	2.54	8.89	8.89
		R	0	В	N	1.4		V
gram	9	.070	.390	.120	.390	.195	.040	.050
0.2		1 78	9 91	3.05	9 91	4.95	1 02	1 27

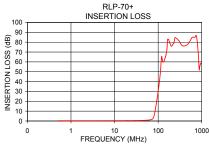
Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



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)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



Features

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

Applications

- wireless communications
- receivers / transmitters

CASE STYLE: GP731

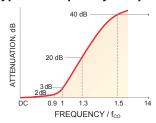
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



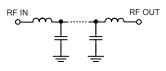
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	fco, MHz Nom.	STOPBAND (MHz)		VSW	R (:1)
(MH2) (Loss < 2dB)	(Loss 3dB)	(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 70	77	100 - 115	115 - 1000	1.1	20

Typical Frequency Response

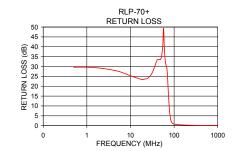


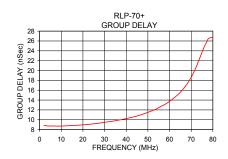
Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	(dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	<u>x</u> `	σ			
0.5	0.26	0.01	29.63	2.0	8.88
30.0	0.46	0.00	26.01	4.0	8.73
50.0	0.73	0.01	34.05	10.0	8.72
70.0	1.44	0.03	26.46	16.0	8.84
74.0	1.96	0.07	16.38	20.0	8.98
77.0	2.86	0.13	10.21	26.0	9.24
80.0	4.64	0.23	5.93	30.0	9.48
84.0	8.66	0.34	2.87	36.0	9.88
86.0	11.14	0.36	2.12	40.0	10.24
92.0	19.15	0.38	1.17	46.0	10.90
100.0	29.98	0.41	0.81	50.0	11.51
110.0	44.80	0.63	0.64	56.0	12.70
115.0	54.65	1.12	0.58	60.0	13.75
200.0	75.92	2.39	0.26	66.0	16.08
400.0	76.19	1.55	0.12	70.0	18.62
600.0	84.79	4.15	0.09	76.0	24.82
800.0	78.30	3.25	0.13	77.0	25.65
1000.0	58.09	0.60	0.14	80.0	26.75





- 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-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp