

Low Pass Filter

Features

- high rejection
- sharp insertion loss roll off
- excellent VSWR, 1.15:1 typ. @ passband
- aqueous washable

Applications

- wireless communications
- receivers / transmitters

HT-RLP-340+



50Ω DC to 340 MHz

Low Pass Filter Electrical Specifications

PASSBAND (MHz) (loss < 2 dB)	f _{co} (MHz) Nom. (loss 3 dB)	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-340	365	475-560	560-1500	1.15	20

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.	

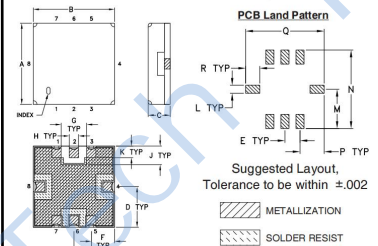
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
0.5	0.02	0.01	41.88	3.0	2.03
50.0	0.15	0.00	31.53	5.0	1.91
150.0	0.30	0.01	33.97	10.0	1.87
300.0	0.68	0.01	30.15	30.0	1.87
320.0	0.81	0.01	39.21	50.0	1.90
340.0	1.10	0.05	19.06	70.0	1.90
356.0	1.90	0.16	10.20	110.0	1.96
365.0	2.89	0.24	6.87	130.0	2.03
376.0	4.77	0.34	4.09	150.0	2.09
396.0	9.66	0.42	1.69	170.0	2.17
432.0	19.55	0.38	0.69	190.0	2.24
460.0	26.81	0.36	0.51	210.0	2.35
475.0	30.57	0.37	0.47	250.0	2.68
518.0	40.89	0.39	0.39	270.0	2.91
560.0	50.95	0.81	0.35	300.0	3.40
700.0	70.40	4.16	0.26	310.0	3.57
1000.0	63.32	2.29	0.21	340.0	4.94
1500.0	58.88	2.43	0.24	350.0	5.38

Pin Connections

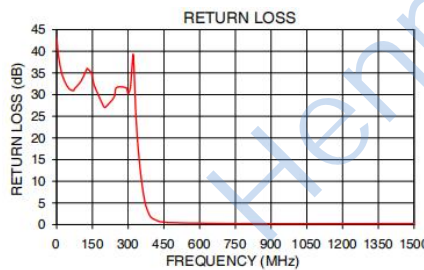
RF IN	2
RF OUT	6
GROUND	1, 3, 4, 5, 7, 8

Outline Drawing

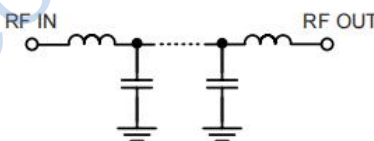


Outline Dimensions (inch/mm)

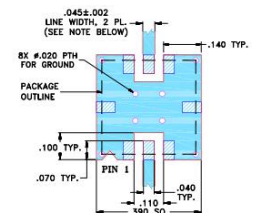
A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
8.89	8.89	2.54	4.45	1.91	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R		wt.
.050	.040	.195	.390	.120	.390	.070		grams
1.27	1.02	4.95	9.91	3.05	9.91	1.78		0.25



Functional Schematic



Suggested PCB Layout



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .005" ± .002", COPPER: 1/2 OZ. 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