

Low Pass Filter

Features

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

Applications

- wireless communications
- receivers / transmitters

HT-RLP-70+



50Ω DC to 70 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-70	77	100-115	115-1000	1.1	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.	

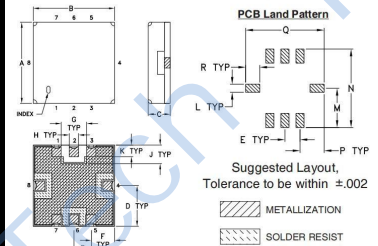
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
0.5	0.26	0.01	29.63	2.0	8.88
30	0.46	0.00	26.01	4.0	8.73
50	0.73	0.01	34.05	10.0	8.72
70	1.44	0.03	26.46	16.0	8.84
74	1.96	0.07	16.38	20.0	8.98
77	2.86	0.13	10.21	26.0	9.24
80	4.64	0.23	5.93	30.0	9.48
84	8.66	0.34	2.87	36.0	9.88
86	11.14	0.36	2.12	40.0	10.24
92	19.15	0.38	1.17	46.0	10.90
100	29.98	0.41	0.81	50.0	11.51
110	44.80	0.63	0.64	56.0	12.70
115	54.65	1.12	0.58	60.0	13.75
200	75.92	2.39	0.26	66.0	16.08
400	76.19	1.55	0.12	70.0	18.62
600	84.79	4.15	0.09	76.0	24.82
800	78.30	3.25	0.13	77.0	25.65
1000	58.09	0.60	0.14	80.0	26.75

Pin Connections

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

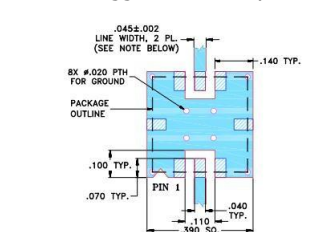
Outline Drawing



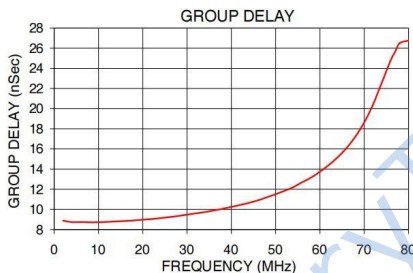
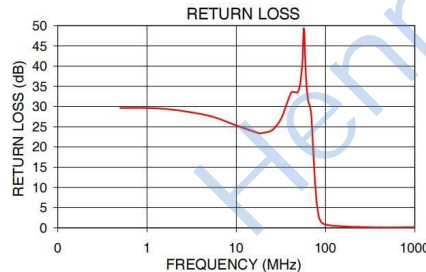
Outline Dimensions (inch/mm)

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

Suggested PCB Layout



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .0025" ± .0002"; 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.
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Functional Schematic

