

Low Pass Filter

Features

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

Applications

- wireless broadband access
- receivers / transmitters

HT-RLP-40+



50Ω DC to 40 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-40	56	70-80	80-800	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.	

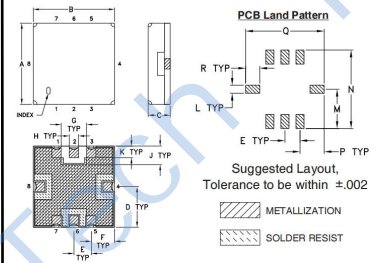
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
0.5	0.50	0.00	25.19	0.5	10.93
10.0	0.52	0.00	23.23	2.0	11.54
26.0	0.67	0.01	32.63	4.0	11.64
40.0	1.01	0.01	36.25	8.0	11.41
56.0	2.80	0.15	13.58	12.0	12.00
60.0	6.79	0.54	4.42	16.0	12.17
62.0	10.60	0.70	2.66	20.0	12.56
66.0	19.71	0.82	1.43	22.0	12.65
70.0	29.39	0.96	1.05	24.0	12.90
80.0	58.83	0.65	0.71	28.0	13.47
100.0	61.12	1.81	0.46	30.0	13.75
200.0	64.67	1.40	0.17	34.0	15.19
300.0	85.19	3.99	0.10	38.0	16.03
400.0	85.20	6.09	0.08	40.0	16.49
500.0	91.89	3.18	0.08	42.0	17.86
600.0	85.33	6.16	0.07	44.0	19.00
700.0	62.07	0.55	0.08	48.0	21.55
800.0	58.10	0.51	0.10	50.0	25.56

Pin Connections

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

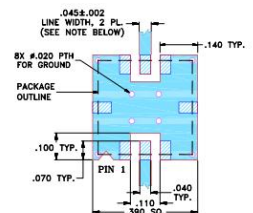
Outline Drawing



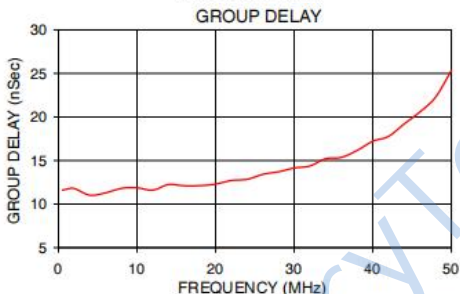
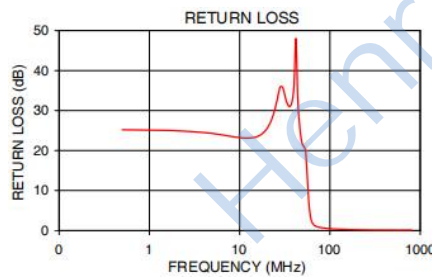
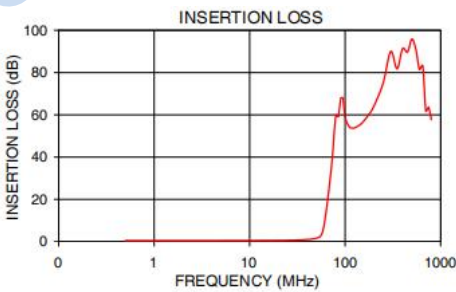
Outline Dimensions (inch/mm)

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 .055" ± .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



Functional Schematic

