

# 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-216+



50Ω DC to 216 MHz

### Low Pass Filter Electrical Specifications

PASSBAND (MHz)  (loss < 2 dB)	f <sub>co</sub> (MHz) Nom.  (loss 3 dB)	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-216	232	295-340	340-1300	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.	

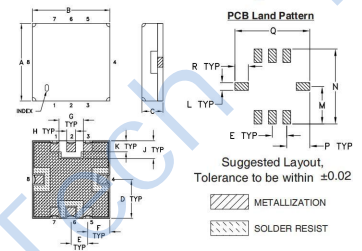
### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
0.5	0.05	0.01	42.75	3.0	3.25
50.0	0.20	0.00	34.32	5.0	3.00
100.0	0.37	0.00	24.10	10.0	3.06
200.0	0.89	0.01	34.46	25.0	2.90
216.0	1.22	0.04	19.35	40.0	3.04
220.0	1.43	0.07	15.08	55.0	3.07
227.0	2.14	0.15	9.51	70.0	3.20
232.0	3.06	0.22	6.64	85.0	3.26
239.0	5.09	0.33	3.90	100.0	3.33
252.0	10.54	0.41	1.63	120.0	3.49
274.0	20.77	0.41	0.76	130.0	3.59
295.0	30.10	0.41	0.56	150.0	4.02
340.0	50.42	0.67	0.40	160.0	4.36
400.0	80.53	5.62	0.32	170.0	4.62
500.0	75.90	6.34	0.22	190.0	5.37
800.0	74.72	3.28	0.15	210.0	6.91
1000.0	69.23	2.91	0.17	216.0	7.79
1300.0	67.62	3.20	0.21	220.0	8.59

### Pin Connections

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

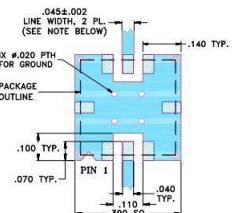
### Outline Drawing



### Outline Dimensions (inch/mm)

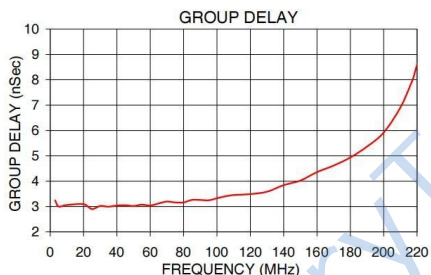
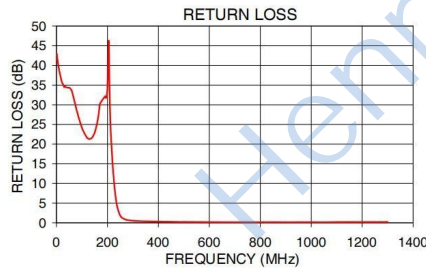
A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
8.89	8.89	2.54	4.45	1.91	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R	wt.	
.050	.040	.195	.390	.120	.390	.070	grams	
1.27	1.02	4.95	9.91	3.05	9.91	1.78	0.25	

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



### NOTES:

1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .0025" ± .0005"; 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

