

## Features

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

## Applications

- satellite
- wireless communications
- receivers / transmitters

## HT-RLP-30+



50Ω DC to 30 MHz

## Low Pass Filter Electrical Specifications

PASSBAND (MHz)  (loss < 2 dB)	f <sub>co</sub> (MHz) Nom.  (loss 3 dB)	STOP BAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-30	37	47-53	53-3000	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.

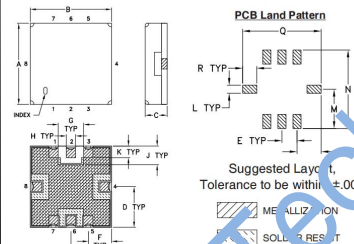
## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
0.5	0.50	0.01	24.98	0.5	16.61
25.0	0.86	0.01	25.36	1.0	16.66
50.0	1.08	0.01	24.46	3.0	16.92
76.0	1.85	0.05	22.30	5.0	17.88
100.0	2.62	0.14	17.45	6.0	18.86
150.0	4.17	0.33	7.75	9.0	17.18
200.0	6.92	0.45	6.00	10.0	17.34
300.0	12.41	0.68	2.51	12.0	17.65
400.0	23.23	0.76	1.47	13.0	17.93
500.0	30.50	0.84	1.21	15.0	18.49
750.0	50.90	1.81	0.84	18.0	19.49
1000.0	52.85	0.47	0.25	21.0	20.94
1500.0	85.89	4.68	0.07	23.0	21.98
2000.0	81.99	3.92	0.09	24.0	22.50
3000.0	76.06	1.88	0.22	25.0	23.31
4000.0	52.57	0.80	0.74	27.0	24.92
5000.0	53.56	0.54	0.48	28.0	26.15
6000.0	47.74	0.55	0.33	30.0	28.61

## Pin Connections

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

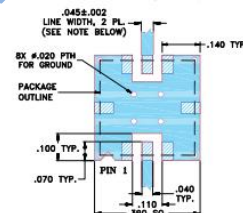
## Outline Drawing



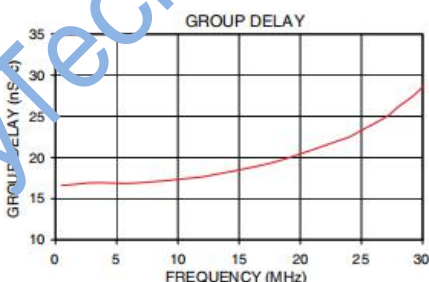
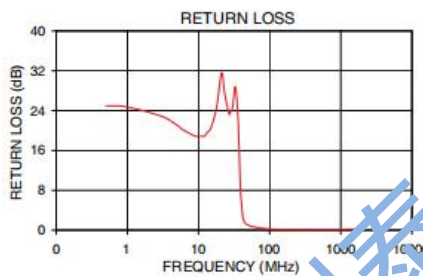
## Outline Dimensions (inch)

A	B	C	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040
8.89	8.89	2.54	4.43	1.91	2.54	2.79	1.02
K	L	M	P	Q	R		wt.
.050	.040	.190	.390	.120	.390	.070	grams
1.27	1.27	4.83	9.91	3.05	9.91	1.78	0.25

## Suggested PCB Layout



- NOTES:
1. TRACE WIDTH IS SHOWN FOR FB4 WITH DIELECTRIC THICKNESS .005" ± .005"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTHS MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
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## Functional Schematic

