

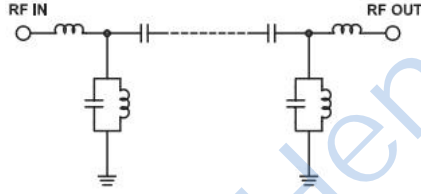
### Features

- Narrow bandwidth
- Sharper cut-off
- Shielded package

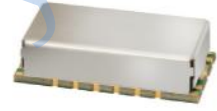
### Applications

- Radio test equipment
- Receiver / Transmitter
- Harmonic rejection

### Functional Schematic



### HL-BPF-F100+



**50Ω 95 to 105 MHz**

### Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	100	-	MHz
	Insertion Loss	95-105	-	5	6	dB
	VSWR	95-105	-	1.58	1.92	:1
Stop Band, Lower	Insertion Loss	DC-85	40	45	-	dB
	VSWR	DC-85	-	20	-	:1
Stop Band, Upper	Insertion Loss	120-900	40	44	-	dB
	VSWR	120-900	-	20	-	:1

### Maximum Ratings

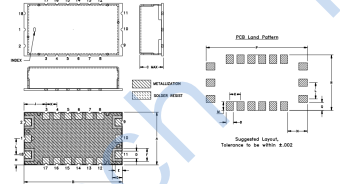
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	1W max @ 25°C

Permanent damage may occur if any of these limits are exceeded.

### Pad Connections

INPUT	18
OUTPUT	9
GROUND	1,3,4,5,6,7,8,10,12,13,14,15,16,17
NO CONNECTION	2,11

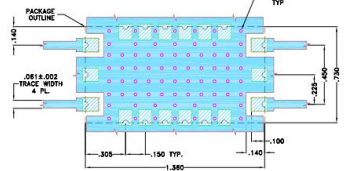
### Outline Drawing



### Outline Dimensions: Unit ( mm )

A	18.54	J	7.75
B	34.54	K	3.81
C	8.89	L	5.72
D	2.54	M	3.05
E	2.54	N	6.99
F	4.57	P	35.56
G	3.56	Q	2.79
H	3.56	R	19.56
WT	6.0g		

### Suggested PCB Layout



- NOTES:
1. TRACE WIDTH IS SHOWN FOR OAK-802, WITH DIELECTRIC THICKNESS 0.027"±0.015". 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 SOLDERMASK

### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	104.96	138.75	1450	3.06
50.0	83.35	96.51	1500	2.48
85.0	52.26	35.19	1550	2.18
88.5	30.98	14.40	1600	2.02
89.5	23.60	9.11	1650	1.90
90.0	19.64	6.69	1700	1.79
92.0	6.69	1.26	1750	1.71
95.0	3.78	1.25	1800	1.67
100.0	3.12	1.23	1850	1.65
105.0	3.60	1.06	1950	1.64
108.0	6.46	1.98	2000	1.63
110.5	18.56	9.15	2050	1.63
111.0	21.13	11.14	2100	1.64
112.0	25.88	15.20	2150	1.69
113.0	30.12	19.30	2200	1.75
116.0	40.59	31.70	2250	1.82
120.0	51.10	48.50	2300	1.92
300.0	95.33	817.79	2350	2.03
500.0	103.03	744.47	2400	2.23
900.0	93.09	286.61	2450	2.53

