

# Low Pass Filter

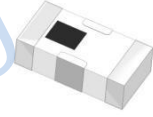
## Features

- excellent power handling
- small size
- 7 sections
- temperature stable
- LTCC construction, and has good moisture resistance, corrosion resistance, high reliability.

## Applications

- harmonic rejection
- VHF/UHF transmitters/receivers
- Base Station of Mobile Communication, lab use.

## HT-LFCN-3400+



50 Ω DC to 3400 MHz

### Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-3400	-	1.1	1.3	dB
	Freq.Cut-Off	3950	-	3.0	-	dB
	VSWR	DC-3400	-	1.2	1.5	:1
Stop Band	Rejection Loss	4300-4600	25	30	-	dB
		4600-7800	25	30	-	dB
	VSWR	7800-8300	-	20	-	dB
		4300-8300	-	20	-	:1

Measured on Fenghua Characterization Test Board T-39.

### Typical Performance Data

(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

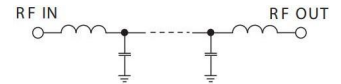
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.01	1.01
100	0.03	1.01
500	0.08	1.04
1000	0.15	1.10
2000	0.31	1.32
3400	1.03	1.99
3950	3.04	2.21
4050	6.01	3.38
4150	12.50	6.26
4300	29.75	11.53
4600	25.02	19.32
5050	23.78	26.33
6500	24.27	28.96
7800	25.25	19.32
8300	21.39	18.11

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

\* Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

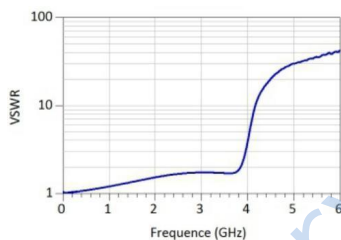
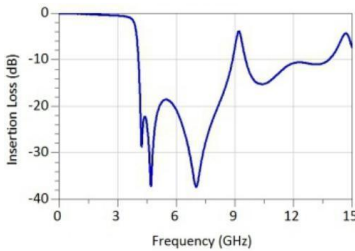
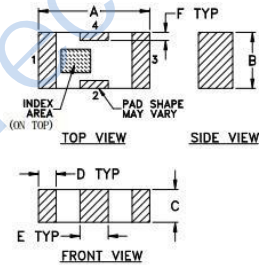
### Electrical Schematic



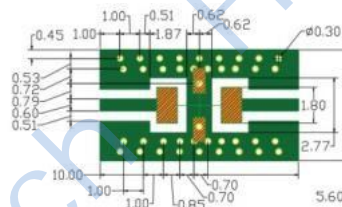
### Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

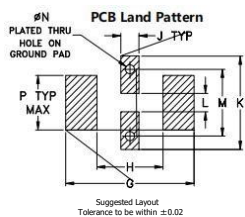
### Outline Drawing



### Demo Board P/N: T-39 Suggested PCB Layout (PL-137)



- NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP 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



### Outline Dimensions: Unit (mm)

Parameter	Value	Parameter	Value	Parameter	Value
A	3.20	B	1.60	C	0.95
D	0.51	E	0.81	F	0.23
G	4.29	H	2.21	J	0.61
K	3.10	L	0.61	M	2.21
N	0.30	P	1.80	wt	0.02g