

# Low Pass Filter

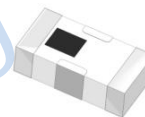
## Features

- 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-2750+



50Ω DC to 2750 MHz

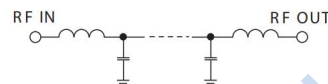
Electrical Specifications at 25°C						
Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-2750	-	-	1.0	dB
	Freq.Cut-Off	3150	-	3.0	-	dB
	VSWR	DC-2750	-	1.2	-	:1
Stop Band	Rejection Loss	4000	20	-	-	dB
		4100-6800	-	30	-	dB
	VSWR	8400	-	20	-	dB
		4000-8400	-	20	-	:1

Typical Performance Data at 25°C			
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
1	0.02	1.00	
500	0.12	1.05	
1300	0.24	1.12	
2100	0.40	1.12	
2750	0.77	1.21	
3150	1.89	1.49	
3775	37.14	26.51	
3900	43.66	30.54	
4400	41.49	41.64	
5600	37.83	59.97	
6400	35.25	58.58	
6800	35.69	57.21	
7800	40.21	52.07	
8400	44.80	49.62	
9000	48.60	46.50	

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

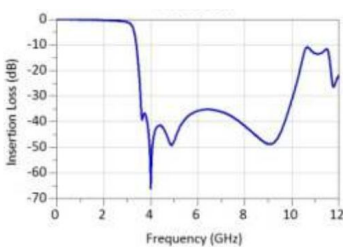
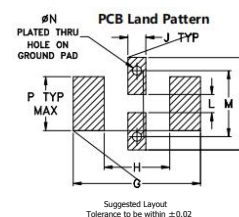
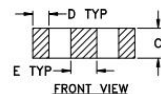
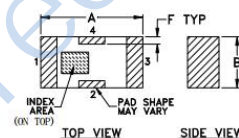
\* Passband rating, derate linearly to 3.5W at 100°C ambient.  
Permanent damage may occur if any of these limits are exceeded.

## Electrical Schematic

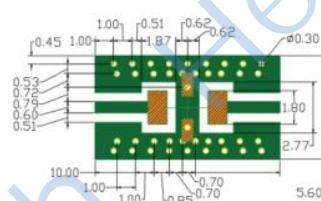


Pin Connections	
RF IN	1
RF OUT	3
GROUND	2,4

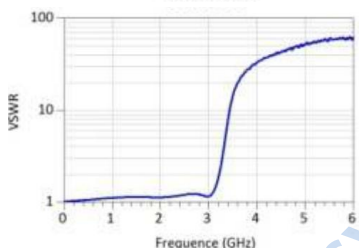
## Outline Drawing



## Suggested PCB Layout



- NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS R04350 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)					
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