

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-3600+

Features

- Low insertion loss.
- Good rejection.
- LTCC Construction.
- temperature stable.
- Small size.

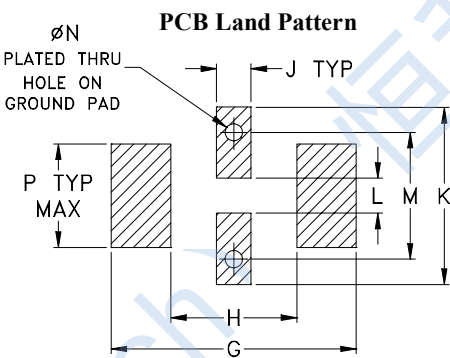
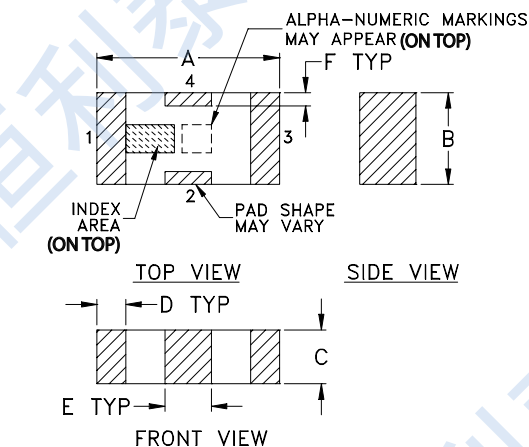
Applications

- Harmonic rejection.
- VHF/UHF transmitters/receivers.
- Lab use.

Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing

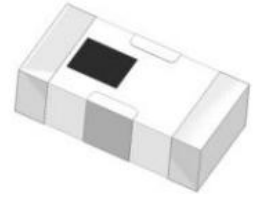
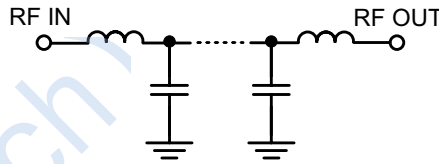


Suggested Layout,
Tolerance to be within ± 0.002

Outline Dimensions : inch mm

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.126	.063	.037	.020	.032	.009	.169	.087	.024	.122	.024	.087	.012	.071	grams
3.20	1.60	0.94	0.51	0.81	0.23	4.29	2.21	0.61	3.10	0.61	2.21	0.30	1.80	.020

Functional Schematic



50 Ω
DC to 3600MHz

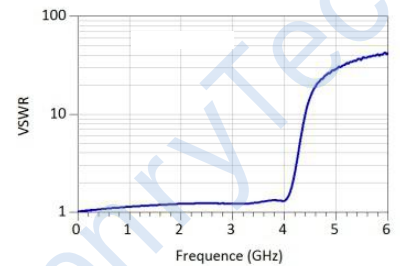
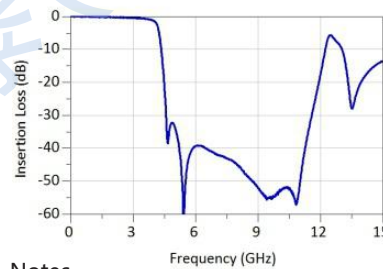
Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-3600	-	0.8	1.0	dB
	Freq. Cut-Off	5090	-	3.0	-	dB
	VSWR	DC-3600	-	1.2	1.5	:1
Stop Band	Rejection Loss	4790	20	30	-	dB
		5700-8300	25	30	-	dB
		13000	15	23	-	dB
	VSWR	6000-13000	-	20	-	:1

1. In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Typical Performance Data at 25°C

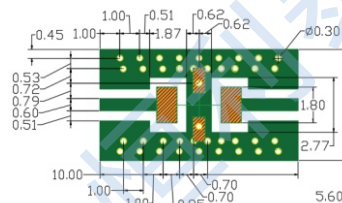
Frequency (Mhz)	Insertion Loss (dB)	VSWR (:1)
500	0.09	1.10
1500	0.21	1.25
3000	0.28	1.19
3900	0.41	1.11
4500	0.65	1.06
4700	0.88	1.13
4800	1.07	1.26
5000	2.04	1.87
5500	17.90	8.77
6000	32.50	14.56
7000	36.65	42.40
8000	36.07	73.26
9000	36.60	84.59
10000	34.47	72.20
13000	27.08	18.61



Notes

- The specifications are tested at 25°C $\pm$ 5°C, relative humidity 55~75%.
- Other quality and characteristic not specify in this datasheet.

Suggested PCB Layout



- NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" $\pm$.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

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.

Tel: +86-28-85589664

E-mail: mr_li@henglitaitech.com

Web: www.hltchips.com

Room 1401, 14th Floor, Building 5, Huaxi Science and Technology Innovation Center, No. 50, Shuixi Road, Jinniu District, Chengdu City