成都恒利泰科技有限公司
Chengdu HenryTech Technology co., Ltd

LTCC 低通滤波器（Low Pass Filter） HT-LFCN-2400+

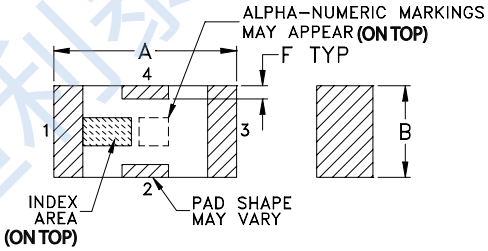
Features
- Low insertion loss.
- Good rejection.
- LTCC Construction.
- temperature stable.
- Small size.

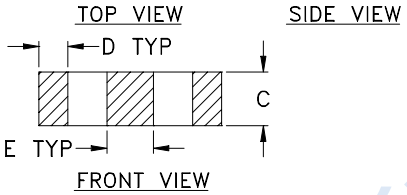
Applications
- Harmonic rejection.
- VHF/UHF transmitters/receivers.
- Lab use.

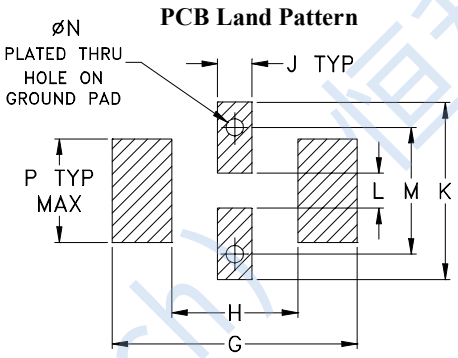
Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing







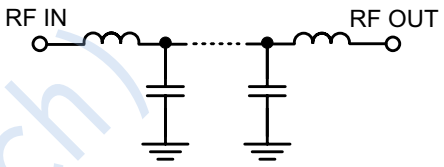
Suggested Layout,
Tolerance to be within ±.002

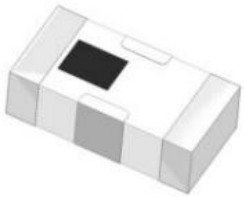
Outline Dimensions： inch / mm

A	B	C	D	E	F	G
.126	.063	.037	.020	.032	.009	.169
3.20	1.60	0.94	0.51	0.81	0.23	4.29

H	J	K	L	M	N	P	wt
.087	.024	.122	.024	.087	.012	.071	grams
2.21	0.61	3.10	0.61	2.21	0.30	1.80	.020

Functional Schematic





50Ω
DC to 2400MHz

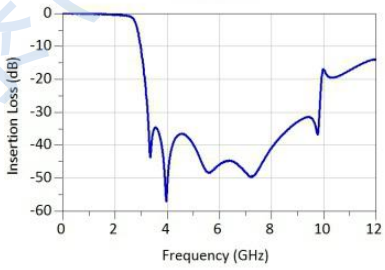
Electrical Specifications(1) at 25°C

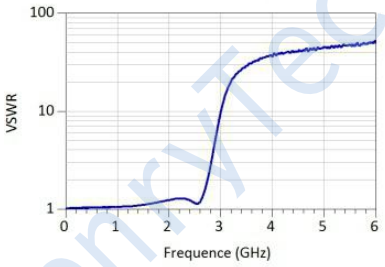
Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-2400	-	0.9	1.5	dB
	Freq. Cut-Off	2620	-	3.0	-	dB
	VSWR	DC-2500	-	1.2	1.5	:1
Stop Band	Rejection Loss	3600	20	-	-	dB
		3700-4000	-	30	-	dB
		5000	-	20	-	dB

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

Typical Performance Data at 25°C

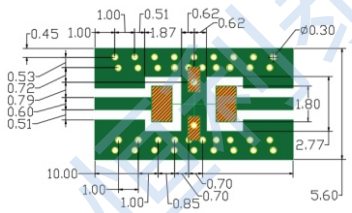
Frequency (Mhz)	Insertion Loss (dB)	VSWR (:1)
50	0.04	1.01
500	0.15	1.03
1000	0.24	1.03
2000	0.73	1.48
2500	1.16	1.31
3050	31.05	19.62
3500	38.32	31.55
3600	46.01	33.32
4000	37.30	38.96
5000	45.67	39.83
6000	37.42	29.90
7000	39.65	28.41
8000	50.38	29.70
9000	44.61	24.80
10000	15.71	15.46





Notes
a. The specifications are tested at 25℃±5℃, relative humidity 55~75%.
b. 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" ± .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*	9W at 25°C

*Passband rating, derate linearly to 4W at 100℃ ambient. Permanent damage may occur if any of these limits are exceeded.

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