

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-1400+

Features

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

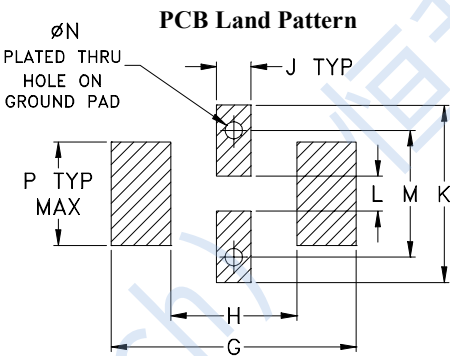
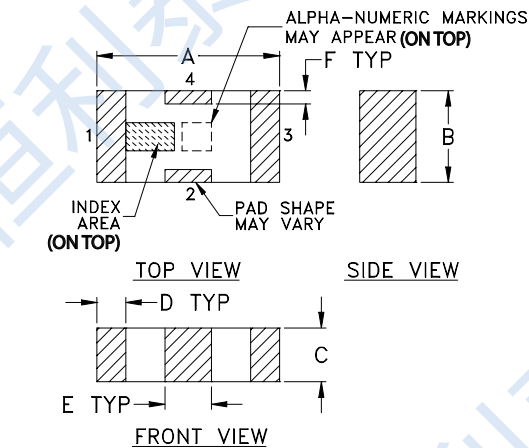
Applications

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

Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing

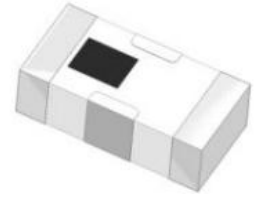
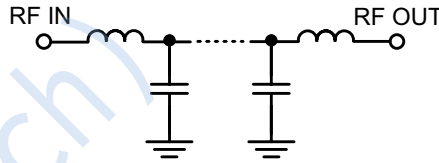


Suggested Layout,
Tolerance to be within ± 0.002

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 1400MHz

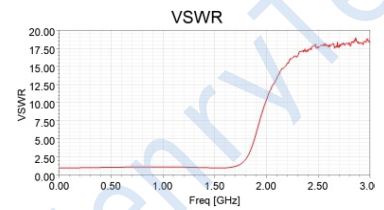
Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-1400	-	-	1.0	dB
	Freq. Cut-Off	1790	-	3.0	-	dB
	VSWR	DC-1400	-	1.2	1.5	:1
Stop Band	Rejection Loss	2015	20	-	-	dB
		2100-6600	-	30	-	dB
		6800	-	20	-	dB
		VSWR	2015-6800	-	20	:1

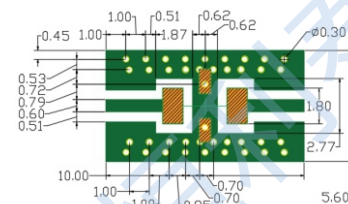
1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Typical Performance Data at 25°C

Frequency (Mhz)	Insertion Loss (dB)	VSWR (:1)
100	0.10	1.03
500	0.21	1.11
1000	0.41	1.17
1400	0.66	1.06
1700	1.53	1.24
1975	19.32	9.41
2000	23.38	10.38
2050	33.66	12.14
3000	38.96	17.54
4000	30.80	18.16
5000	28.92	26.12
6600	28.54	39.71
6800	25.89	27.65
7000	21.74	



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*	8W 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.

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