

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-3000+

Features

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

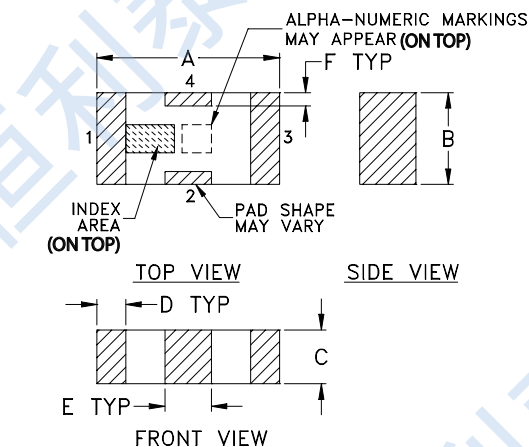
Applications

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

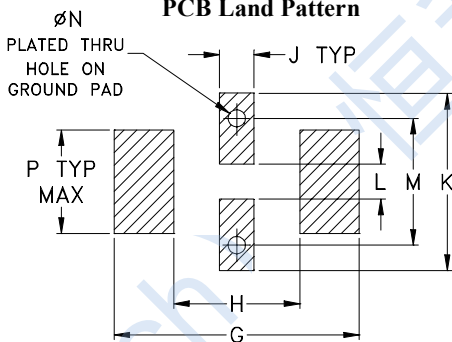
Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



PCB Land Pattern



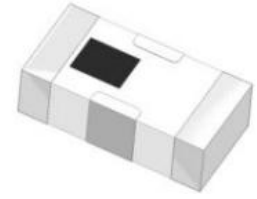
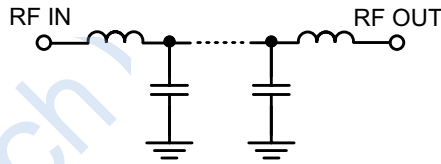
Suggested Layout,
Tolerance to be within ± 0.002

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



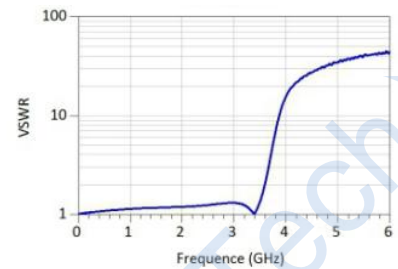
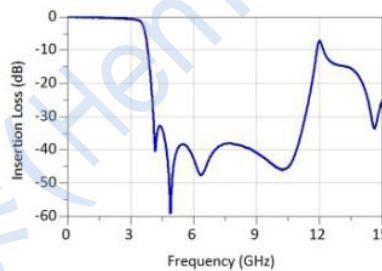
50 Ω
DC to 3000MHz

Electrical Specifications(1) at 25°C

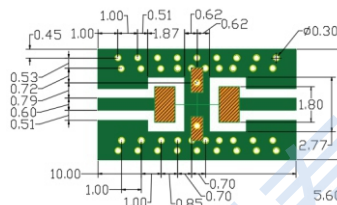
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Freq. Cut-Off	3620	—	3.0	dB
	Insertion Loss	DC-3000	—	1.1	dB
	VSWR	DC-3000	—	1.2	: 1
Stop Band	Rejection Loss	4200-6000	25	30	dB
		8000	25	30	dB
	VSWR	4200-8000	—	20	: 1

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

Typical Performance Data at 25°C



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 +125°C
Storage Temperature	-55°C to +125°C
RF Power Input*	10W max at 25°C

*Permanent damage may occur if any of these limits are exceeded.