

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-5000+

Features

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

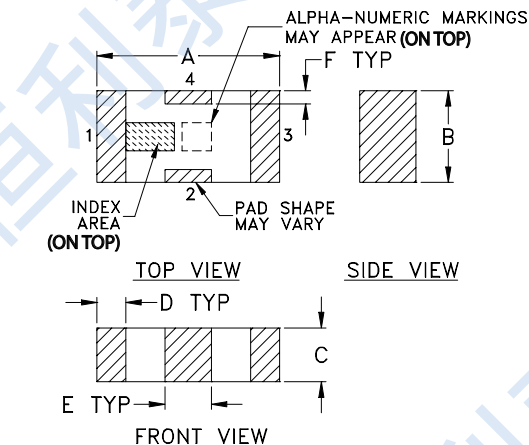
Applications

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

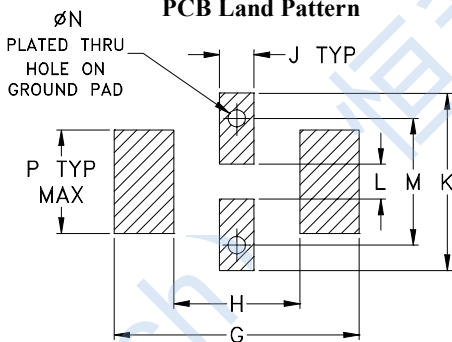
Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



PCB Land Pattern



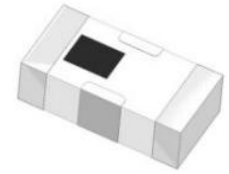
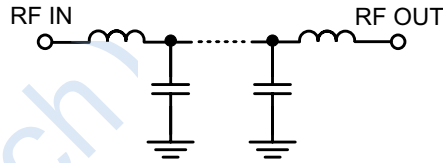
Suggested Layout,
Tolerance to be within ± 0.002

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



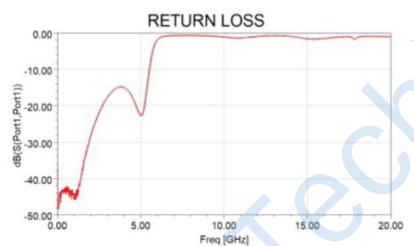
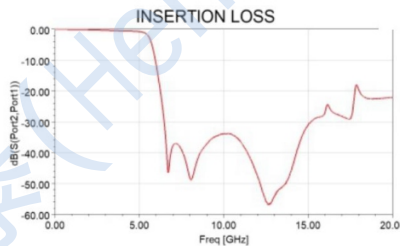
50 Ω
DC to 5000MHz

Electrical Specifications(1) at 25°C

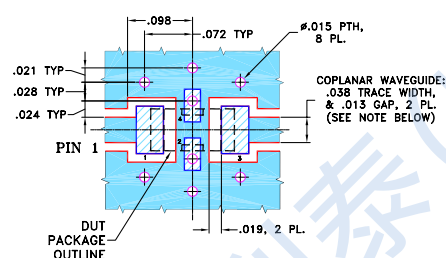
Parameter		Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	DC-5000	—	—	1.0	dB
	VSWR	DC-5000	—	1.5	—	: 1
	Freq. Cut-Off	5610	—	3.0	—	dB
Stop Band	Rejection Loss	6850	20	—	—	dB
		7050	—	30	—	
		18000	—	20	—	
	VSWR	6850-18000	—	20	—	: 1

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 RO4350B WITH THICKNESS .020" $\pm$.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*	9W at 25°C

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