

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-105+

Features

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

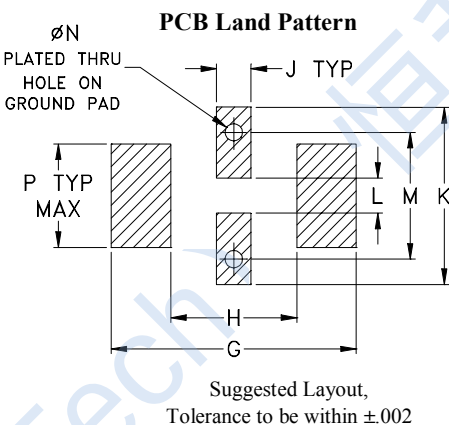
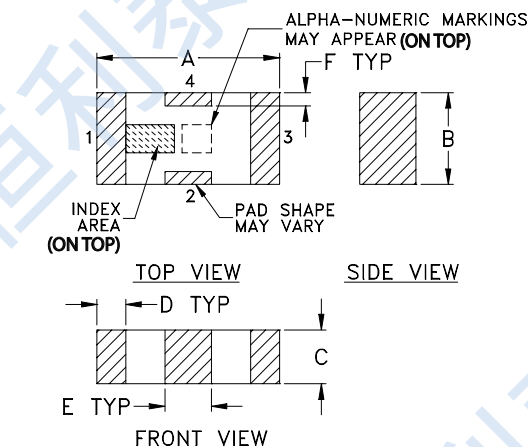
Applications

- Harmonic rejection.
- VHF/UHF transmitters/receivers.
- Anti-aliasing for A/D converter.

Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

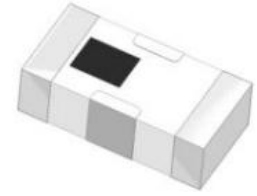
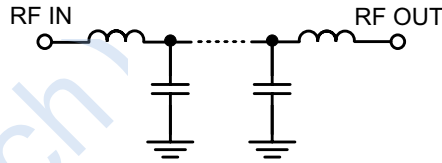
Outline Drawing



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 105MHz

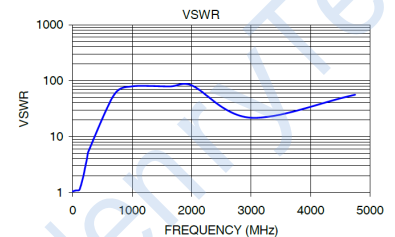
Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-105	-	-	1.0	dB
	Freq. Cut-Off	180	-	3.0	-	dB
	VSWR	DC-105	-	1.2	-	:1
Stop Band	Rejection Loss	250	20	-	-	dB
		265-1650	-	40	-	dB
	VSWR	4750	-	20	-	dB
		250-4750	-	20	-	:1

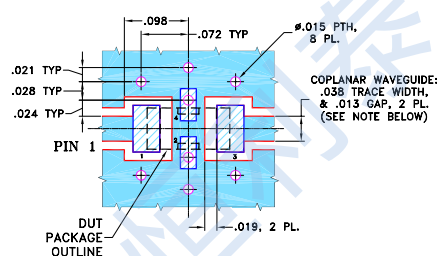
1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Typical Performance Data at 25°C

Frequency (Mhz)	Insertion Loss (dB)	VSWR (:1)
1	0.17	1.04
50	0.44	1.08
100	0.73	1.08
105	0.78	1.09
125	0.98	1.16
180	3.08	1.92
215	10.55	2.88
250	31.43	4.46
265	45.61	5.31
700	46.98	56.04
1000	55.37	78.97
1650	51.39	78.97
2000	43.21	82.73
3000	31.32	21.73
4750	25.73	56.04



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 +100°C
Storage Temperature	-55°C to +100°C
RF Power Input*	8.5W max at 25°C

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