

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-9170+

Features

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

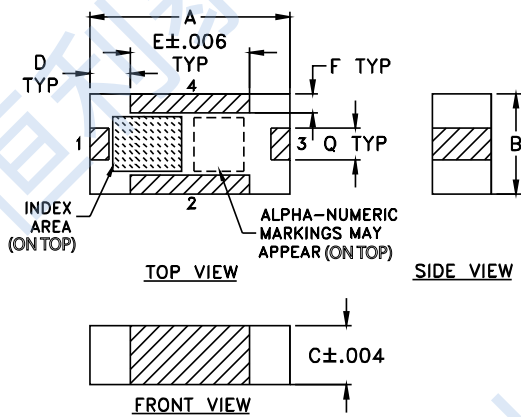
Applications

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

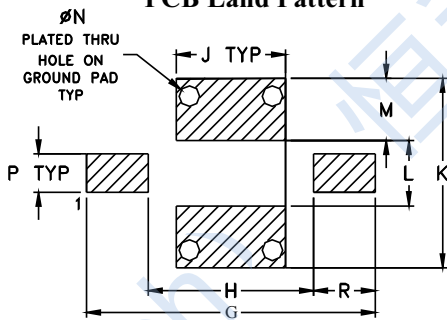
Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



PCB Land Pattern

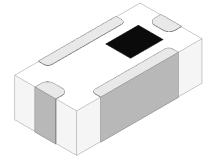
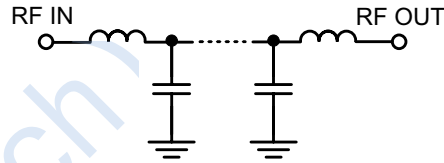


Suggested Layout,
Tolerance to be within $\pm .002$

Outline Dimensions : inch mm

A	B	C	D	E	F	G	H	J
.126	.063	.037	.026	.075	.012	.182	.104	.069
3.20	1.60	0.94	0.66	1.91	0.30	4.62	2.64	1.75
K	L	M	N	P	Q	R	wt	
.119	.041	.039	.013	.024	.020	.039	grams	
3.02	1.04	0.99	0.33	0.61	0.51	0.99	.020	

Functional Schematic



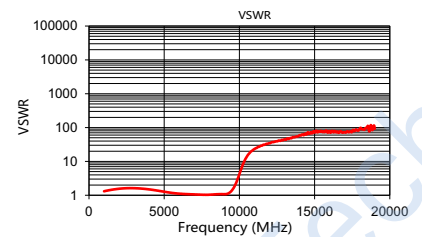
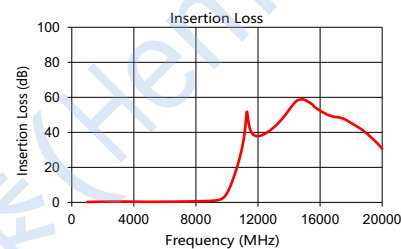
50 Ω
DC to 9170MHz

Electrical Specifications(1) at 25°C

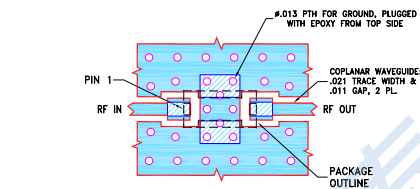
Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC - 9170	—	1.3	3.0	dB
	Freq. Cut-Off	9800	—	3.0	—	dB
	VSWR	DC - 9170	—	1.8	—	:1
Stop Band	Rejection Loss	11630	20	—	—	dB
		12630 - 18770	28	—	—	dB

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

Typical Performance Data at 25°C



Suggested PCB Layout



NOTES:
1. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010±.001, 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.
[Symbol] DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
[Symbol] 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 at 25°C

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