

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCN-160+

Features

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

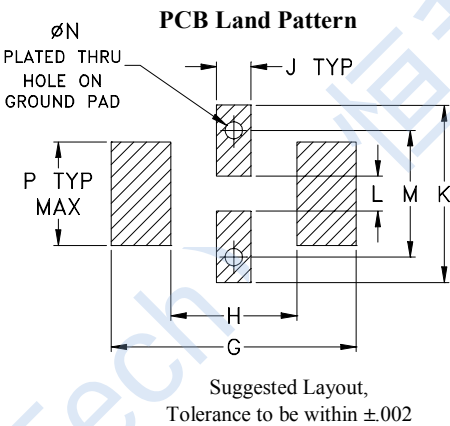
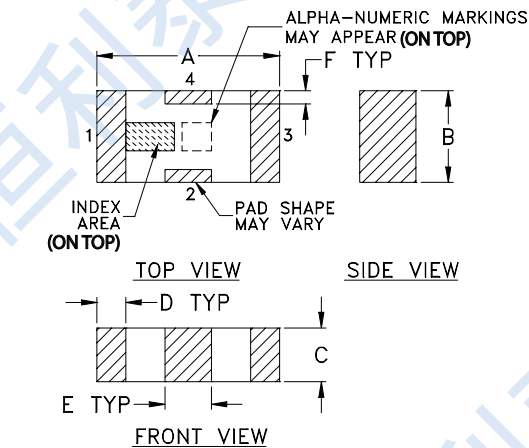
Applications

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

Pad Connections

RF IN	1
RF OUT	3
GROUND	2,4

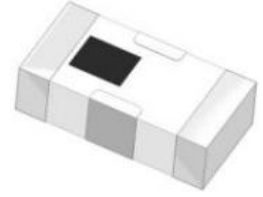
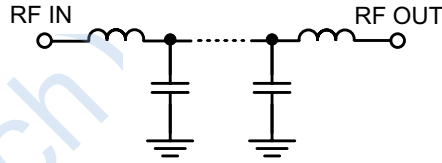
Outline Drawing



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 160MHz

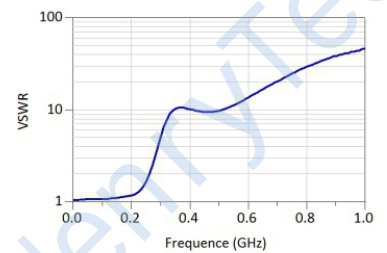
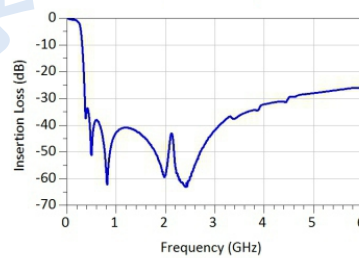
Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-160	-	-	1.0	dB
	Freq. Cut-Off	270	-	3.0	-	dB
	VSWR	DC-160	-	1.2	-	:1
Stop Band	Rejection Loss	330-480	20	-	-	dB
		480-2700	-	40	-	dB
		2700-6100	-	20	-	dB

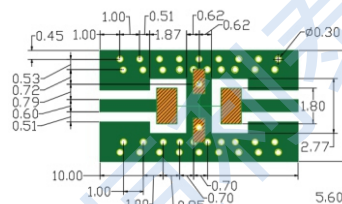
1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Typical Performance Data at 25°C

Frequency (Mhz)	Insertion Loss (dB)	VSWR (:1)
40	0.25	1.06
100	0.43	1.06
160	0.68	1.11
210	1.06	1.20
230	1.37	1.13
325	14.52	8.36
370	34.38	10.62
525	43.48	10.42
950	44.53	42.37
1700	47.20	61.79
2350	61.70	65.80
4500	29.67	71.94
6400	24.99	56.91
7500	22.12	18.86
9000	21.74	3.99



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 at 25°C

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