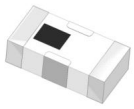
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

Low Pass Filter

JY-LFCN-120+



Generic photo used for illustration purposes only

50Ω DC to 120 MHz

Features

- excellent power handling
- small size
- 7 sections
- temperature stable
- LTCC construction , and has good moisture resistance, corrosion resistance, high reliability.

Applications

- harmonic rejection
- VHF/UHF transmitters/receivers
- Base Station of Mobile Communication、lab use.

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

* Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

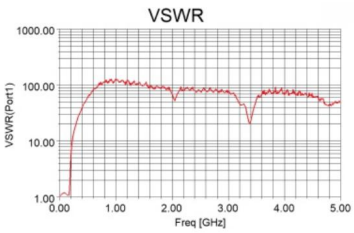
Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-120	-	-	1.0	dB
	Freq.Cut-Off	195	-	3.0	-	dB
	VSWR	DC-120	-	1.2	1.5	:1
Stop Band	Rejection Loss	280	20	-	-	dB
		300-1850	-	40	-	dB
		4750	-	20	-	dB
	VSWR	280-4750	-	20	-	:1

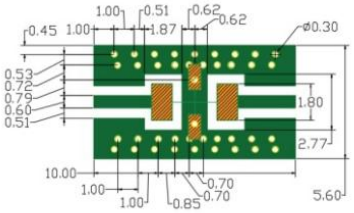
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	0.11	1.05
100	0.60	1.18
120	0.76	1.14
135	0.96	1.09
195	9.86	3.57
270	43.72	16.78
280	50.16	18.28
285	51.48	18.81
300	45.12	21.53
920	39.13	127.50
1100	41.68	120.72
1850	43.04	91.29
2000	40.36	69.85
4000	28.98	73.00
4750	24.51	43.65





Suggested PCB Layout



NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .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.

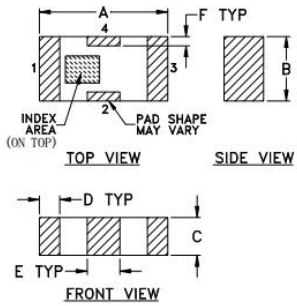
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

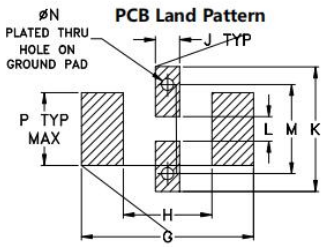
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Electrical Schematic



Outline Drawing





Suggested Layout
Tolerance to be within ±0.05

Outline Dimensions：Unit (mm)

A	3.20	B	1.60	C	0.94
D	0.51	E	0.81	F	0.23
G	4.29	H	2.21	J	0.61
K	3.10	L	0.61	M	2.21
N	0.30	P	1.80	wt	0.02g

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