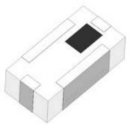
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

Low Pass Filter

JY-LFCN-9170+



Generic photo used for illustration purposes only

50Ω DC to 9170 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.

Electrical Specifications at 25°C

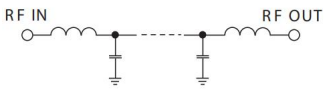
Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-9170	-	1.0	3.0	dB
	Freq.Cut-Off	9800	-	3.0	-	dB
	VSWR	DC-9170	-	1.2	-	:1
Stop Band	Rejection Loss	11630-18770	20	30	-	dB
	VSWR	11630-18770	-	20	-	:1

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W 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.

Electrical Schematic



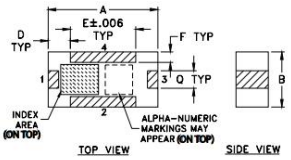
Typical Performance Data at 25°C

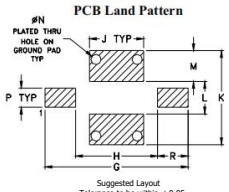
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1000	0.17	1.18
2000	0.30	1.28
4000	0.39	1.17
6000	0.60	1.28
9160	1.27	1.61
9800	1.33	1.07
10000	1.71	1.50
11360	17.11	16.59
11620	21.09	19.23
12000	27.82	21.70
14000	32.28	16.78
16000	38.07	6.33
18000	43.71	28.13
18760	31.92	24.29
19000	29.87	22.05

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

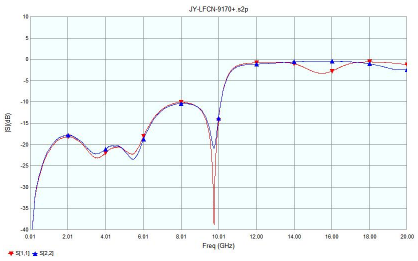
Outline Drawing

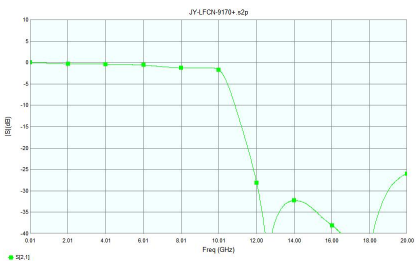




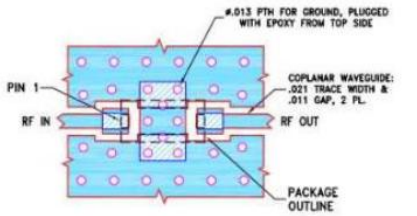
Outline Dimensions：Unit (mm)

A	3.20	B	1.60	C	0.94
D	0.66	E	1.91	F	0.30
G	4.62	H	2.64	J	1.75
K	3.02	L	1.04	M	0.99
N	0.33	P	0.61	Q	0.51
R	0.99	wt	0.02g		





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.

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

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

JY-LFCN-9170+

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