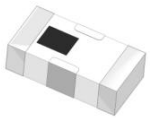
Low Pass Filter

JY-LFCN-6000+



Generic photo used for illustration purposes only

50Ω DC to 6000 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*	10W max. at 25°C

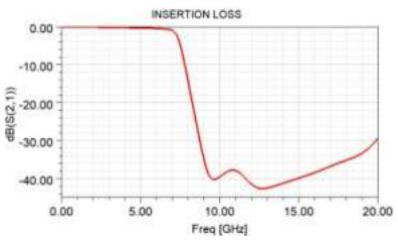
* Passband rating, derate linearly to 3W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

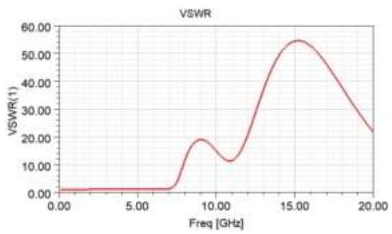
Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-6000	-	-	1.2	dB
	Freq.Cut-Off	6680	-	3.0	-	dB
	VSWR	DC-6000	-	1.2	1.5	:1
Stop Band	Rejection Loss	8500	20	-	-	dB
		8700-14000	-	30	-	dB
		18000	-	20	-	dB
	VSWR	12000-18000	-	20	-	:1

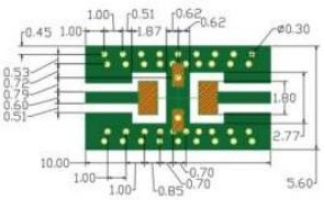
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
500	0.01	1.05
1660	0.09	1.16
3400	0.23	1.32
5170	0.37	1.28
6000	0.48	1.19
7370	3.09	2.75
7800	10.17	8.34
8250	19.70	15.01
8880	32.74	18.96
9700	40.17	16.78
10890	37.77	11.35
13560	41.80	44.85
16000	38.40	52.61
18000	35.13	37.62
20000	29.14	21.58



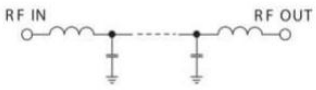


Suggested PCB Layout



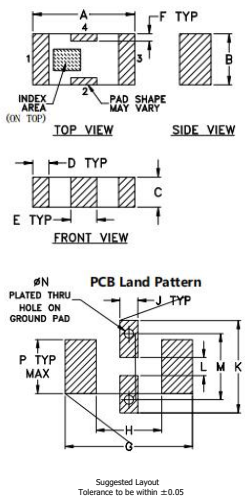
NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Electrical Schematic



Pin Connections	
RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



Outline Dimensions：Unit (mm)

A	3.20	B	1.60	C	0.95
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

JY-LFCN-6000+

Tel : +86 0755-27881106
Fax : +86 0755-27597069
Add : 806 Building B7, Tianrui Industrial Park, Fuyong Street, Baoan District, Shenzhen