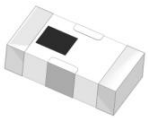
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

Low Pass Filter

JY-LFCN-1500+



Generic photo used for illustration purposes only

50Ω DC to 1500 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

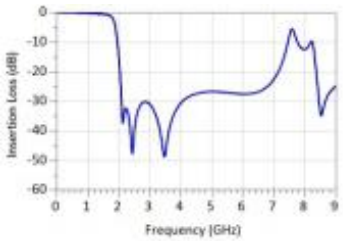
* Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

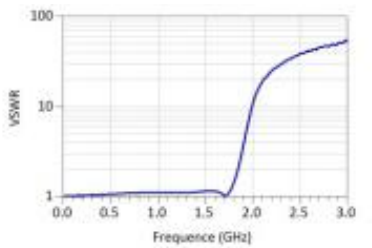
Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-1500	-	1.0	1.3	dB
	Freq.Cut-Off	1790	-	3.0	-	dB
	VSWR	DC-1500	-	1.2	1.5	:1
Stop Band	Rejection Loss	2220	25	30	-	dB
		2380-5800	30	35	-	dB
		6800	20	25	-	dB
	VSWR	2220-6800	-	20	-	:1

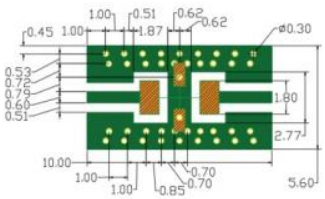
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	0.07	1.03
1000	0.36	1.18
1500	0.68	1.08
1700	1.14	1.12
1844	3.02	2.07
2141	37.28	19.59
2245	32.52	24.94
2461	48.77	33.65
2867	31.75	45.06
3472	50.29	62.72
4507	30.05	71.50
5504	31.16	61.05
6509	31.93	50.33
7000	25.36	40.04
7500	7.15	4.18



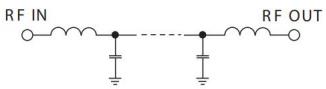


Suggested PCB Layout



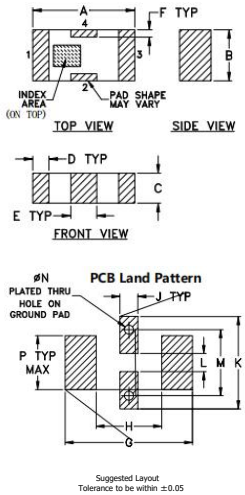
NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE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

Electrical Schematic



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

Outline Drawing



Suggested Layout
Tolerance to be within ±0.05

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-1500+

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