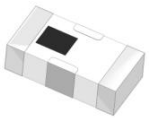
Low Pass Filter

JY-LFCN-5500+



Generic photo used for illustration purposes only

50Ω DC to 5500 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

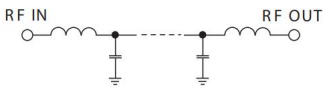
Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-5500	-	0.9	1.4	dB
	Freq.Cut-Off	6200	-	3.0	-	dB
	VSWR	DC-5500	-	1.2	1.5	:1
Stop Band	Rejection Loss	7200	20	30	-	dB
		6700-9500	-	30	-	dB
		9500-12100	-	25	-	dB
	VSWR	6000-13000	-	20	-	:1

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 Schematic



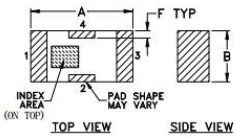
Typical Performance Data at 25°C

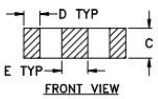
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
500	0.09	1.10
1500	0.19	1.25
2770	0.25	1.27
4110	0.32	1.26
5500	0.66	1.39
6390	3.00	2.69
6900	19.15	5.24
7070	35.05	6.96
7380	30.58	13.09
7840	54.09	26.17
8180	37.71	36.38
9440	34.40	58.38
10540	34.28	55.04
11920	32.91	41.07
13000	31.82	27.99

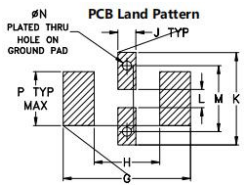
Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing





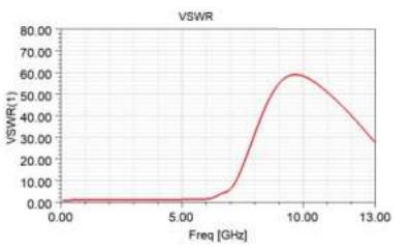


Suggested Layout
Tolerance to be within ±0.05

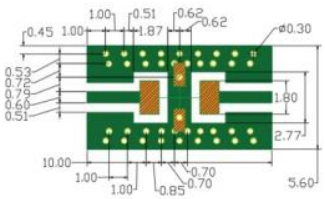
Outline Dimensions：Unit (mm)

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





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

JY-LFCN-5500+

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