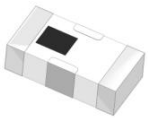
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

Low Pass Filter

JY-LFCN-490+



Generic photo used for illustration purposes only

50Ω DC to 490 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.

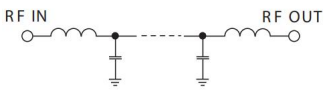
Maximum Ratings	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

* 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-490	-	0.8	1.0	dB
	Freq.Cut-Off	650	-	3.0	-	dB
	VSWR	DC-490	-	1.2	-	:1
Stop Band	Rejection Loss	800	20	-	-	dB
		880-2500	-	40	-	dB
		6000	-	20	-	dB
	VSWR	800-6000	-	20	-	:1

Electrical Schematic

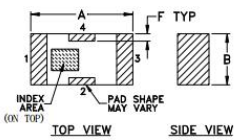


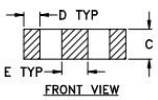
Pin Connections	
RF IN	1
RF OUT	3
GROUND	2,4

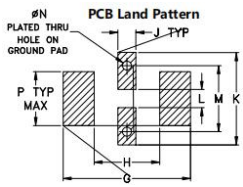
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.05	1.01
100	0.20	1.04
575	0.81	1.05
770	2.92	1.99
900	33.14	13.92
1050	47.43	22.87
1215	36.74	29.96
1500	43.94	40.41
1915	71.13	49.64
2200	62.28	49.64
2500	52.63	51.10
3200	47.83	46.96
4000	38.32	43.44
4970	16.59	8.64
5500	25.11	29.46

Outline Drawing



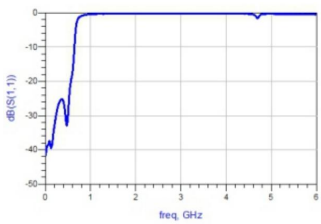




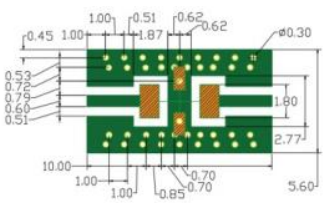
Suggested Layout
Tolerance to be within ±0.05

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-490+

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