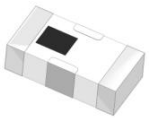
Low Pass Filter

JY-LFCN-1000+



Generic photo used for illustration purposes only

50Ω DC to 1000 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.

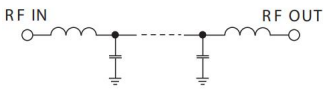
Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-1000	-	-	1.0	dB
	Freq.Cut-Off	1342	-	3.0	-	dB
	VSWR	DC-1000	-	1.3	-	:1
Stop Band	Rejection Loss	1550	20	-	-	dB
		2000-5500	-	30	-	dB
	VSWR	1550-5500	-	20	-	:1

Typical Performance Data at 25°C

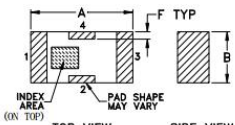
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.07	1.01
500	0.25	1.04
1000	0.57	1.19
1275	2.00	1.84
1500	22.46	10.12
2000	46.99	23.57
2750	49.66	38.19
3250	39.16	42.11
4000	39.26	48.08
4600	45.27	41.10
5125	41.44	37.56
5500	34.81	34.36
6000	29.12	30.40
6500	25.06	25.94
7000	19.27	10.57

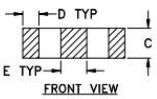
Electrical Schematic

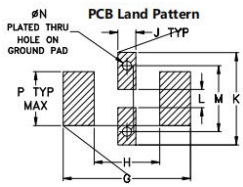


Pin Connections	
RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing

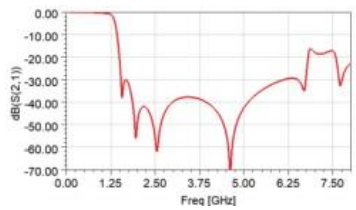


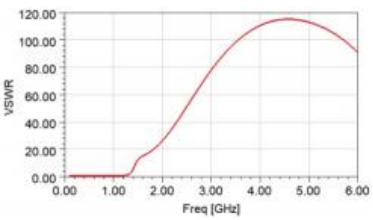




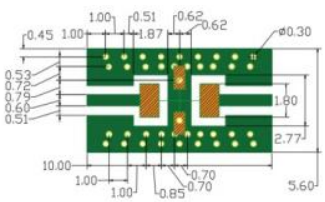
Suggested Layout
Tolerance to be within ±0.05

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





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-1000+

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