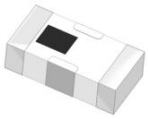
Low Pass Filter

JY-LFCN-400+



Generic photo used for illustration purposes only

50Ω DC to 400 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

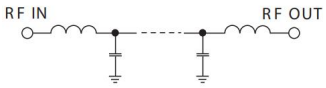
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

* 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-400	-	0.8	1.0	dB
	Freq.Cut-Off	560	-	3..0	-	dB
	VSWR	DC-400	-	1.2	1.5	:1
Stop Band	Rejection Loss	660	20	30	-	dB
		680-3000	25	30	-	dB
		5500	20	23	-	dB
	VSWR	660-5500	-	20	-	:1

Electrical Schematic

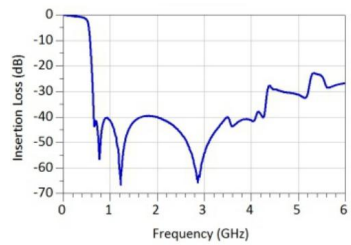


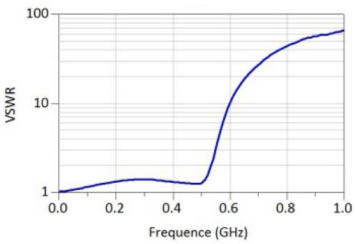
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.06	1.03
100	0.25	1.05
400	0.44	1.20
560	0.66	2.00
680	46.15	23.10
700	44.00	26.14
1000	41.70	58.20
2000	43.40	134.50
2500	50.57	157.00
3000	37.60	168.00
4000	28.55	109.00
5000	25.57	129.80
5500	23.40	96.75
6000	22.53	82.09
7000	17.03	72.64

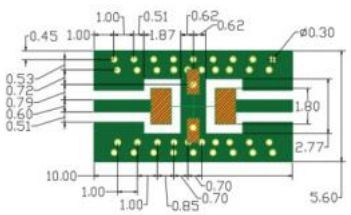
Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4





Suggested PCB Layout

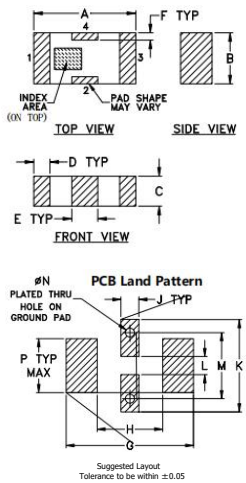


NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

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