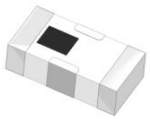
Low Pass Filter

JY-LFCN-3800+



Generic photo used for illustration purposes only

50Ω DC to 3900 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*	8W max. at 25°C

* Passband rating, derate linearly to 3W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

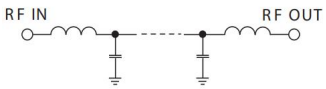
Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-3900	-	0.8	1.0	dB
	Freq.Cut-Off	5090	-	3.0	-	dB
	VSWR	DC-3900	-	1.2	1.5	:1
Stop Band	Rejection Loss	6000	20	30	-	dB
		5700-8300	25	30	-	dB
		13000	15	23	-	dB
	VSWR	6000-13000	-	20	-	:1

Typical Performance Data at 25°C

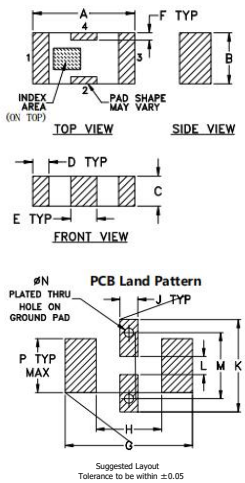
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
500	0.09	1.10
1500	0.21	1.25
3000	0.28	1.19
3900	0.41	1.11
4500	0.65	1.06
4700	0.88	1.13
4800	1.07	1.26
5000	2.04	1.87
5500	17.9	8.77
6000	32.5	14.56
7000	36.65	42.40
8000	36.07	73.26
9000	36.60	84.59
10000	34.47	72.20
13000	27.08	18.61

Electrical Schematic

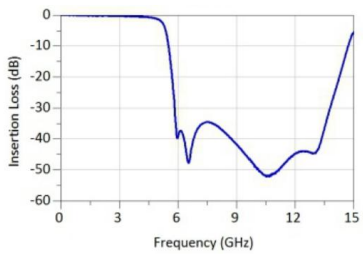


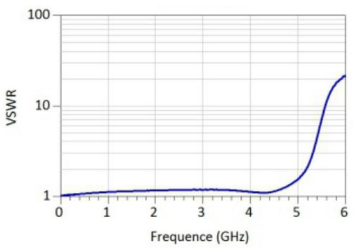
Pin Connections	
RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing

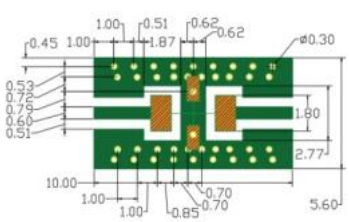


Outline Dimensions：Unit (mm)					
A	3.20	B	1.60	C	0.95
D	0.51	E	0.81	F	0.23
G	4.29	H	2.21	J	0.61
K	3.10	L	0.61	M	2.21
N	0.30	P	1.80	wt	0.02g





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

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