

# Low Pass Filter

## 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.

## HT-LFCN-7200+



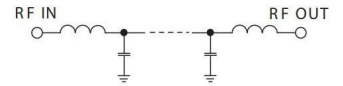
50Ω DC to 7200 MHz

### 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.

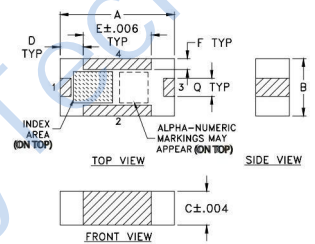
### Electrical Schematic



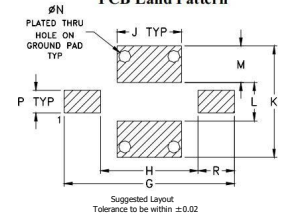
### Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

### Outline Drawing



### PCB Land Pattern



### Outline Dimensions: Unit (mm)

A	3.20	B	1.60	C	0.94
D	0.66	E	1.91	F	0.30
G	4.62	H	2.64	J	1.75
K	3.02	L	1.04	M	0.99
N	0.33	P	0.61	Q	0.51
R	0.99	wt			0.02g

### Electrical Specifications at 25°C

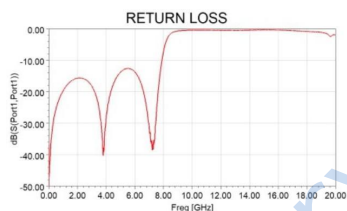
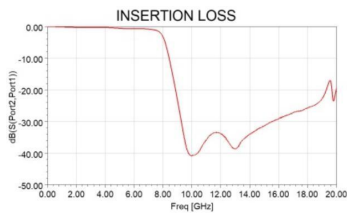
Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-7200	-	-	2	dB
	Freq.Cut-Off	7970	-	3.0	-	dB
	VSWR	DC-7200	-	1.6	-	:1
Stop Band	Rejection Loss	8980	20	-	-	dB
		9270-10060	25	30	-	dB
		15000	-	30	-	:1

Measured on Fenghua Characterization Test Board T-11.

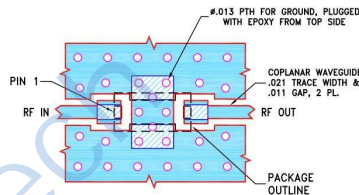
### Typical Performance Data

(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.03	1.04
500	0.09	1.03
2000	0.24	1.22
3600	0.49	1.53
6000	0.66	1.14
7200	1.31	1.41
8000	2.00	1.21
8150	3.08	1.74
8350	7.37	4.31
8550	15.08	9.38
8730	24.45	13.49
8850	33.13	15.67
9500	31.08	17.75
9600	30.50	18.50
10500	25.86	17.22
12300	20.34	16.11
15000	14.21	9.85



### Demo Board P/N: T-11 Suggested PCB Layout (PL-137)



#### NOTES:

1. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010±.001. 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.