

Low Pass Filter

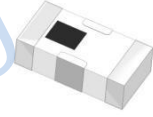
Features

- 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-6400+

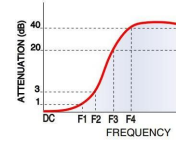


50Ω DC to 6400 MHz

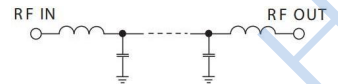
Maximum Ratings	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

* Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Frequency Response

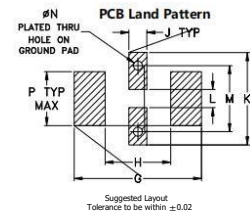
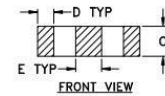
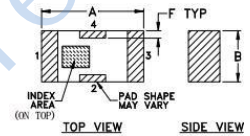


Electrical Schematic



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	

Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-6400	-	-	2.0	dB
	Freq.Cut-Off	7200	-	3.0	-	dB
	VSWR	DC-6400	-	1.2	-	:1
Stop Band	Rejection Loss	8500	20	30	-	dB
		12500	20	25	-	dB
		8500-12500	-	17	-	:1

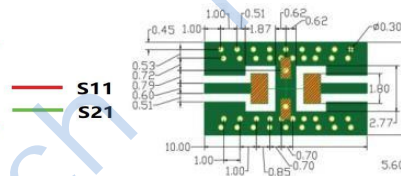
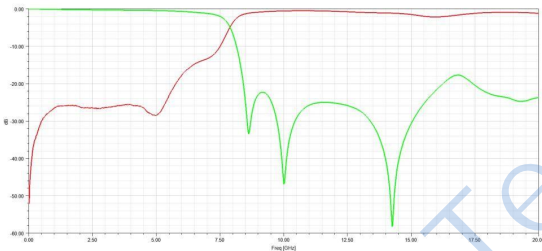
Measured on Fenghua Characterization Test Board T-39.

Typical Performance Data

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

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.03	1.01
500	0.10	1.07
2000	0.24	1.10
4000	0.38	1.11
5500	0.55	1.15
6400	0.88	1.42
7000	1.24	1.55
7200	1.43	1.62
7350	1.66	1.72
7500	2.86	1.91
7680	3.54	2.38
7770	14.91	2.78
8300	35.75	9.56
10200	25.77	32.41
11000	25.87	33.02
12500	30.63	21.63
15000	2.03	11.41

Demo Board P/N: T-39 Suggested PCB Layout (PL-137)



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.
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