

Low Pass Filter

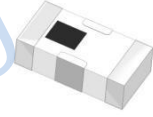
Features

- 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-2500+

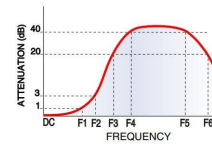


50Ω DC to 2500 MHz

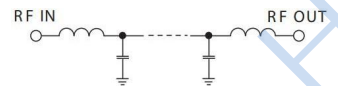
Maximum Ratings	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

* 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



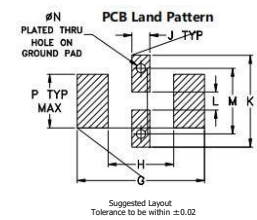
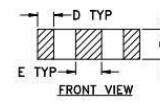
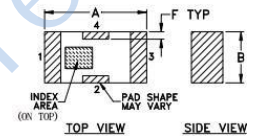
Electrical Schematic



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

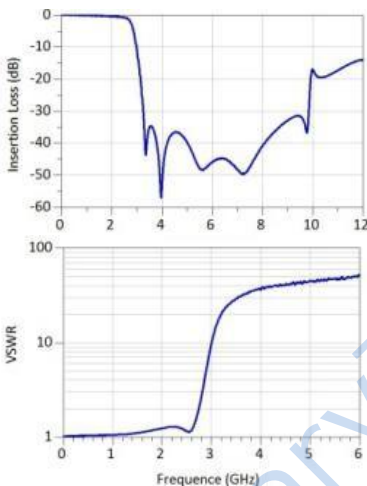
Parameter	F#	Frequency(MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-2500	-	1.1	1.3	dB
	Freq.Cut-Off	F2	2620	-	3.0	-	dB
	VSWR	DC-F1	DC-2500	-	1.2	1.5	:1
Stop Band	Rejection Loss	F3	3560	25	30	-	dB
		F4-F5	3800-6100	25	35	-	dB
	VSWR	F6	8000	20	30	-	dB
		F3-F6	3600-8000	-	20	-	:1

Measured on Fenghua Characterization Test Board T-39.

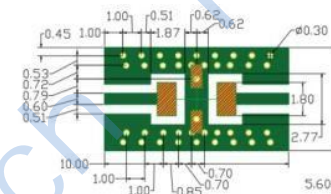
Typical Performance Data

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

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.04	1.01
500	0.15	1.03
1000	0.24	1.03
2000	0.73	1.48
2500	1.16	1.31
3050	31.05	19.62
3500	38.32	31.55
3600	46.01	33.32
4000	37.30	38.96
5000	45.67	39.83
6000	37.42	29.90
7000	39.65	28.41
8000	50.38	29.70
9000	44.61	24.80
10000	15.71	15.46



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



- 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