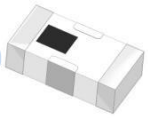
HenryTech

Low Pass Filter

HT-LFCN-3000+



50Ω DC to 3000 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

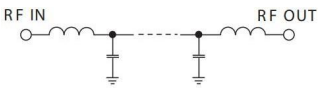
* Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-3000	-	1.0	1.3	dB
	Freq.Cut-Off	3520	-	3.0	-	dB
	VSWR	DC-3000	-	1.2	1.5	:1
Stop Band		4200-6000	25	30	-	dB
	Rejection Loss	8000	25	30	-	dB
	VSWR	4200-8000	-	20	-	:1

Measured on Fenghua Characterization Test Board T-39.

Electrical Schematic



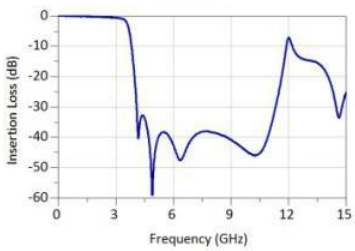
Pin Connections

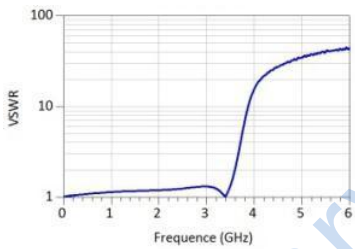
RF IN	1
RF OUT	3
GROUND	2,4

Typical Performance Data

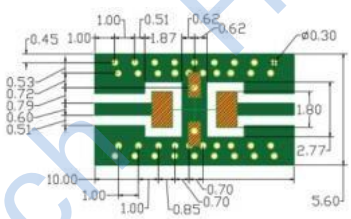
(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	0.04	1.02
1000	0.19	1.08
2000	0.37	1.14
3000	0.79	1.27
3500	2.61	1.96
4000	30.80	15.80
4800	57.00	29.15
5000	41.14	32.48
5500	36.60	40.39
6000	41.10	46.63
6000	45.80	51.33
7000	41.55	52.35
8000	38.60	47.21
9000	39.36	40.29
10000	38.24	34.77





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

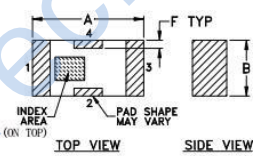


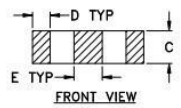
NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

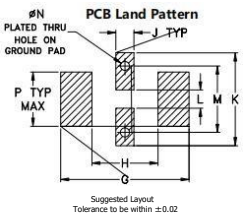
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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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