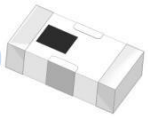
HenryTech

Low Pass Filter

HT-LFCN-1500+



50Ω DC to 1500 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

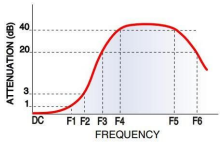
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

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

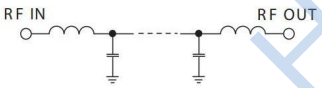
Electrical Specifications at 25°C

Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-1500	-	1.0	1.3	dB
	Freq.Cut-Off	F2	1790	-	3.0	-	dB
	VSWR	DC-F1	DC-1500	-	1.2	1.5	:1
Stop Band	Rejection Loss	F3	2220	25	30	-	dB
		F4-F5	2380-5800	30	35	-	dB
		F6	6800	20	25	-	dB
	VSWR	F3-F6	2220-6800	-	20	-	:1

Typical Frequency Response



Electrical Schematic



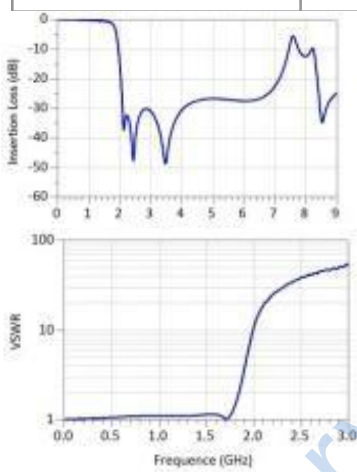
Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

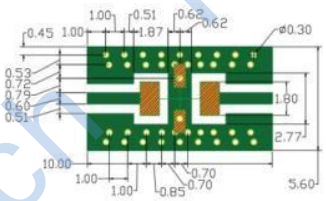
Typical Performance Data

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

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	0.07	1.03
1000	0.36	1.18
1500	0.68	1.08
1700	1.14	1.12
1844	3.02	2.07
2141	37.28	19.59
2245	32.52	24.94
2461	48.77	33.65
2867	31.75	45.06
3472	50.29	62.72
4507	30.05	71.50
5504	31.16	61.05
6509	31.93	50.33
7000	25.36	40.04
7500	7.15	4.18



Suggested PCB Layout

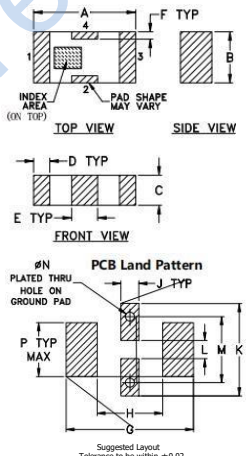


NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

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

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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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