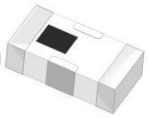
HenryTech

Low Pass Filter

HT-LFCN-95+



50Ω DC to 95 MHz

Features

- excellent power handling
- small size
- 7 sections
- temperature stable
- LTCC construction , and has good moisture resistance, corrosion resistance, high reliability.

Applications

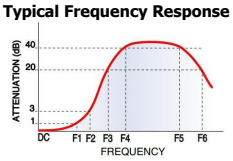
- harmonic rejection
- VHF/UHF transmitters/receivers
- Base Station of Mobile Communication、 lab use.

Maximum Ratings

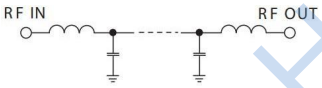
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8.5W max. at 25°C

* 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



Electrical Specifications at 25°C

Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-95	-	0.9	1.1	dB
	Freq.Cut-Off	F2	140	-	3.0	-	dB
	VSWR	DC-F1	DC-95	-	1.4	-	:1
Stop Band	Rejection Loss	F3	240	20	30	-	dB
		F4-F5	255-1600	-	35	-	dB
	VSWR	F6	4500	-	23	-	dB
		F3-F6	240-4500	-	20	-	:1

Measured on Fenghua Characterization Test Board T-39.

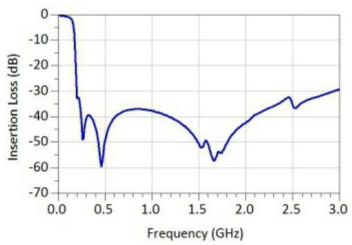
Pin Connections

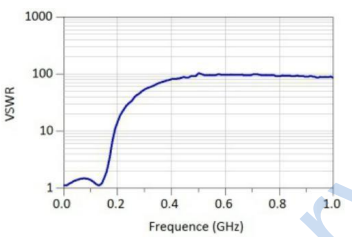
RF IN	1
RF OUT	3
GROUND	2,4

Typical Performance Data

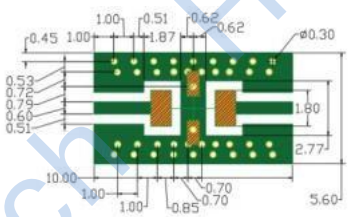
(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	0.35	1.10
50	0.65	1.40
95	0.91	1.44
140	2.70	1.21
170	20.61	3.22
200	35.67	15.62
225	44.62	22.15
500	46.55	88.14
1000	46.10	145.17
1550	42.26	170.10
2000	34.15	172.43
2500	29.42	146.20
3500	26.69	113.29
4500	20.81	55.64
5000	18.34	35.05





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

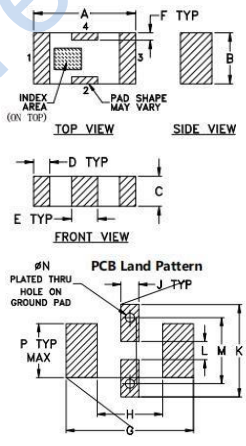


NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

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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