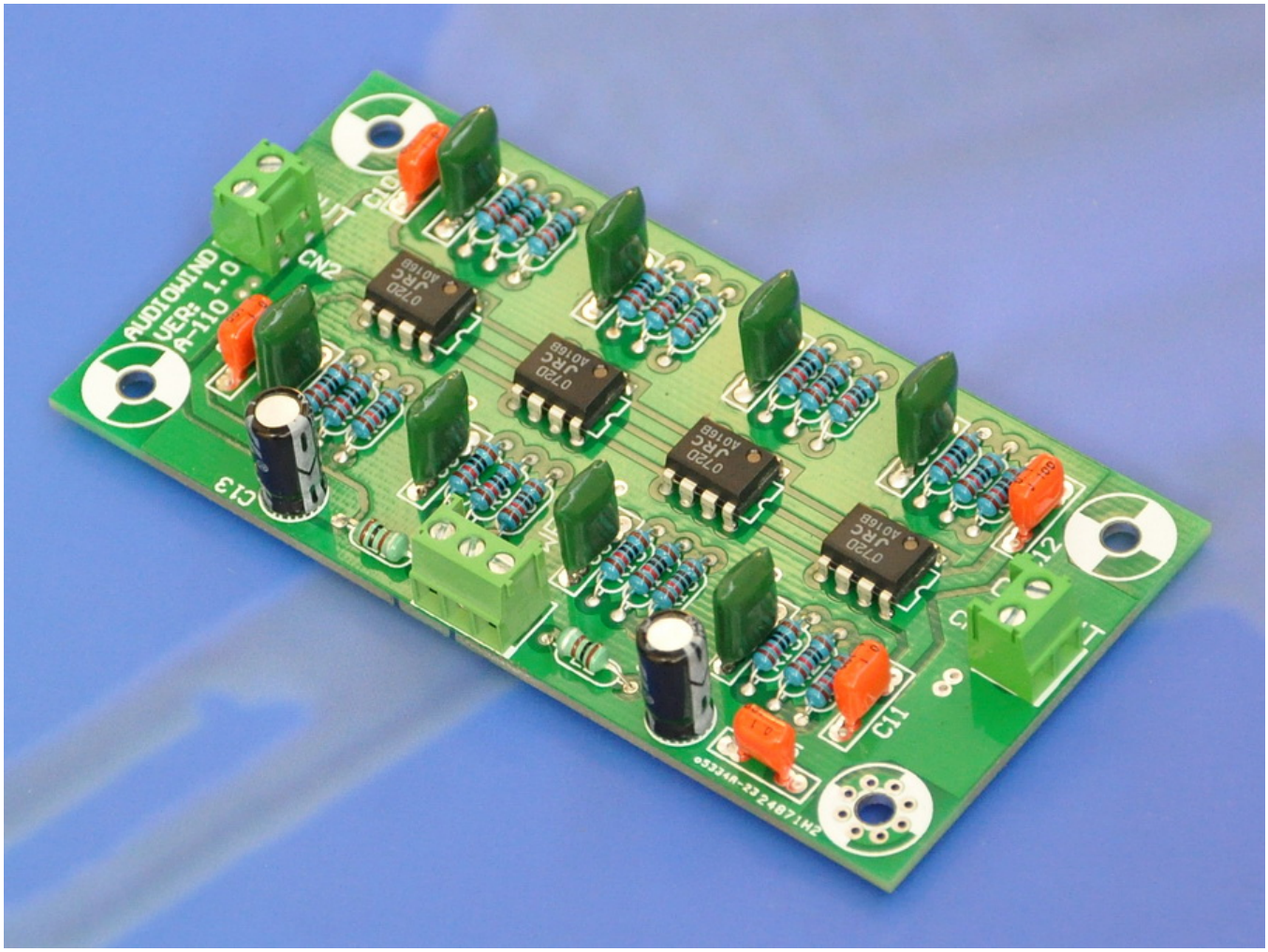
AudioWind
Electronics-Salon

Model: A-110



8 Pole Audio All Pass Filter/Phase Rotator.

Based on NJM072D OP-AMP Design.

For this module, I suggest you read this great introduction page:

http://www.w3am.com/8poleapf.html

This is a very simple circuit, Electrical Characteristics please read NJM072D Datasheet,

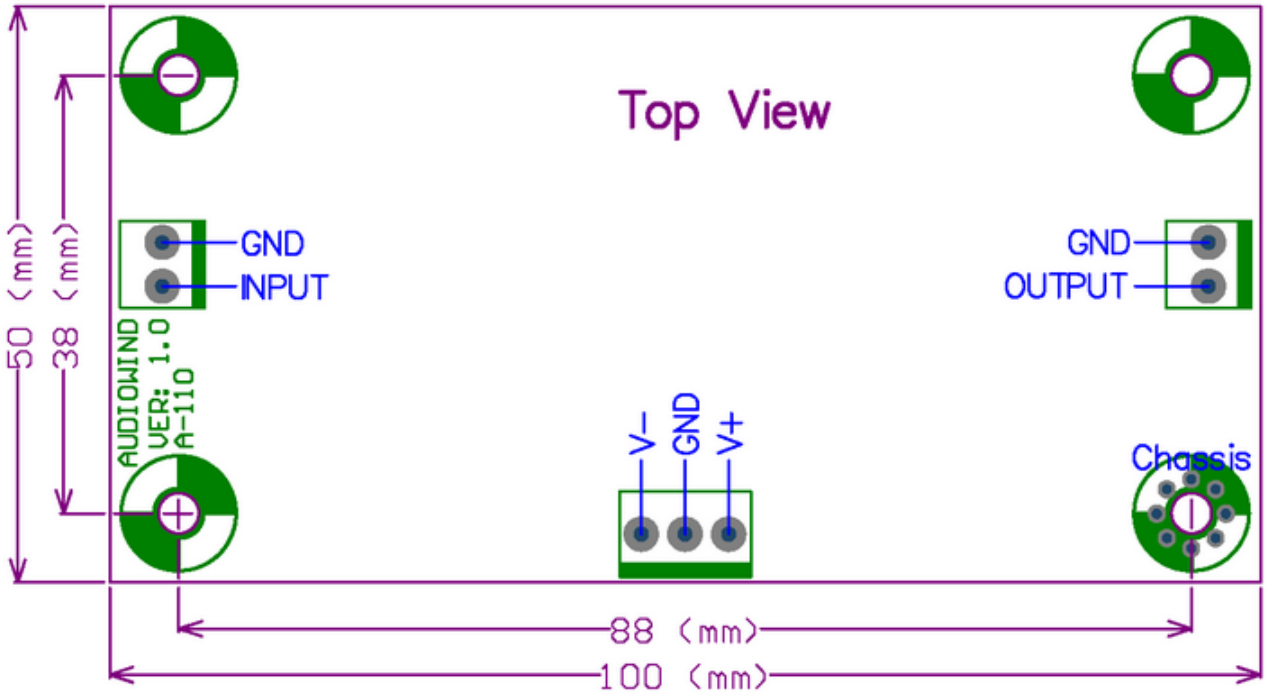
Any questions, feel free to tell me, My email: Jianglily2005@gmail.com

Power Supply:	**+/- 5VDC to +/- 18VDC (< 200mA).**
	Recommend best +/- 15VDC.
Input Impedance:	**5.5k OHM (@1kHz Sine wave).**
Input Level:	**2000mV RMS (@Power supply +/- 9VDC).**
	2500mV RMS (@Power supply +/- 12VDC).
	3000mV RMS (@Power supply +/- 15VDC).
Frequency Response:	**10Hz - 100kHz (-3dB).**
Module Size:	**2" x 3" (50mm x 100mm), Max. height: 0.63" (16mm).**

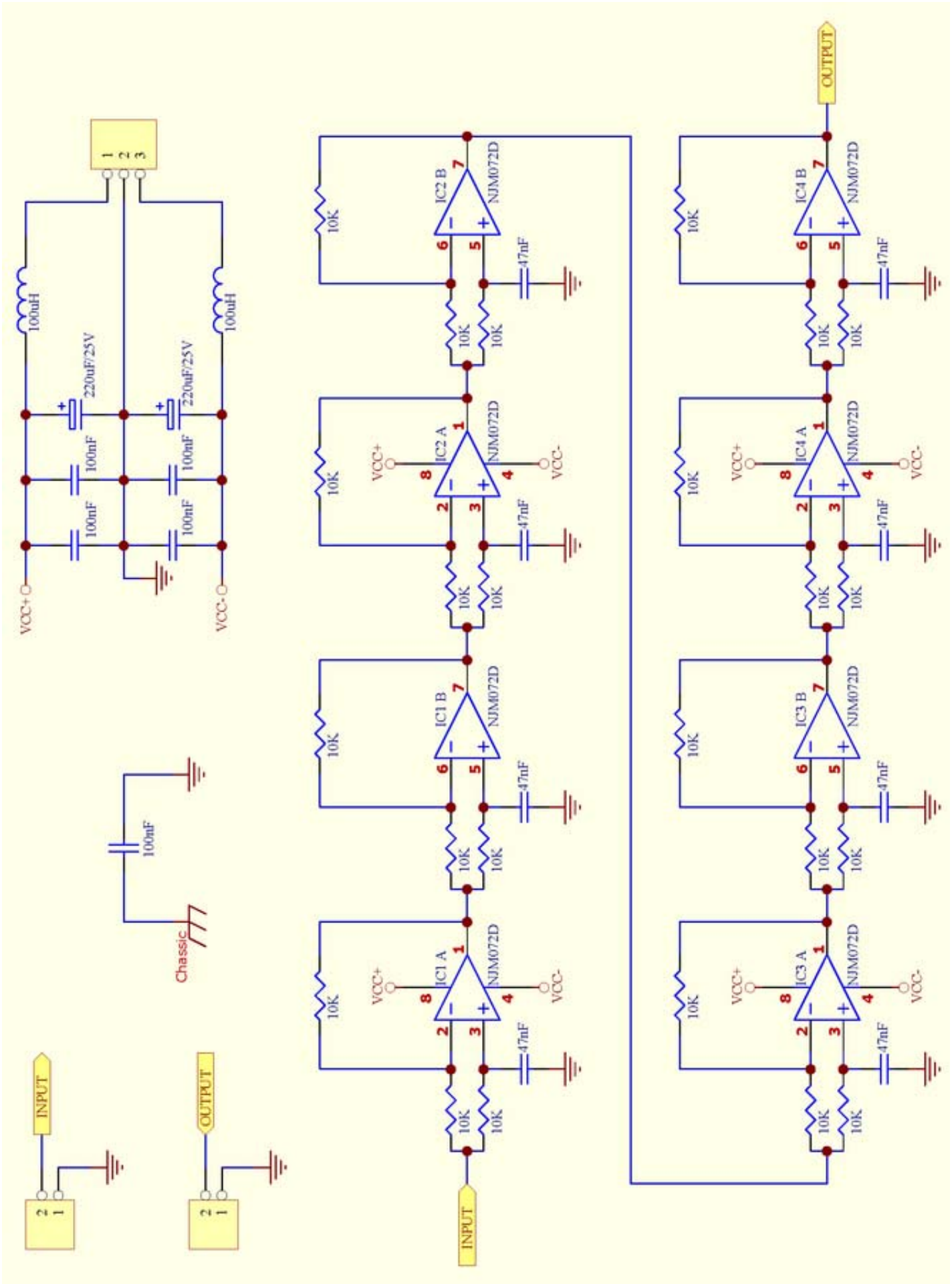
NJM072D IC Datasheet Link:

http://www.cn.njr.com/PDF/NJM072_NJM072B_NJM082_NJM082B_E.pdf

PCB size and wring diagram:

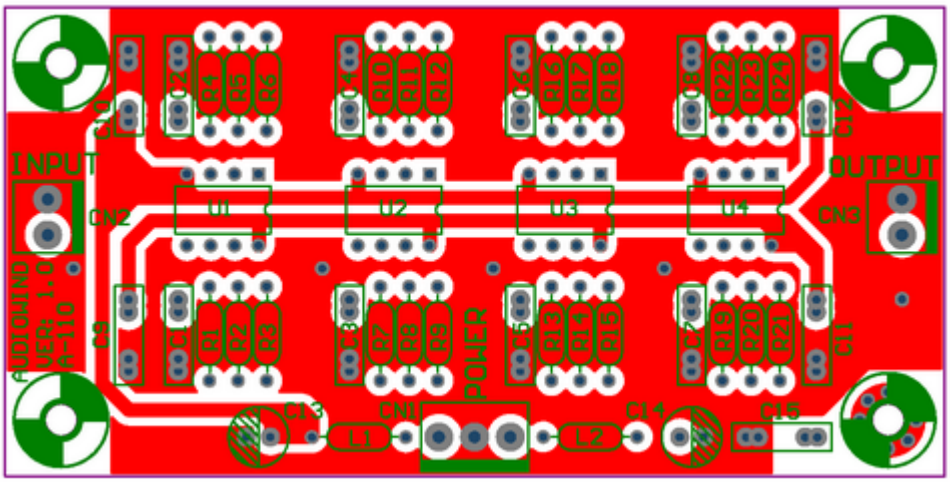


Schematic:

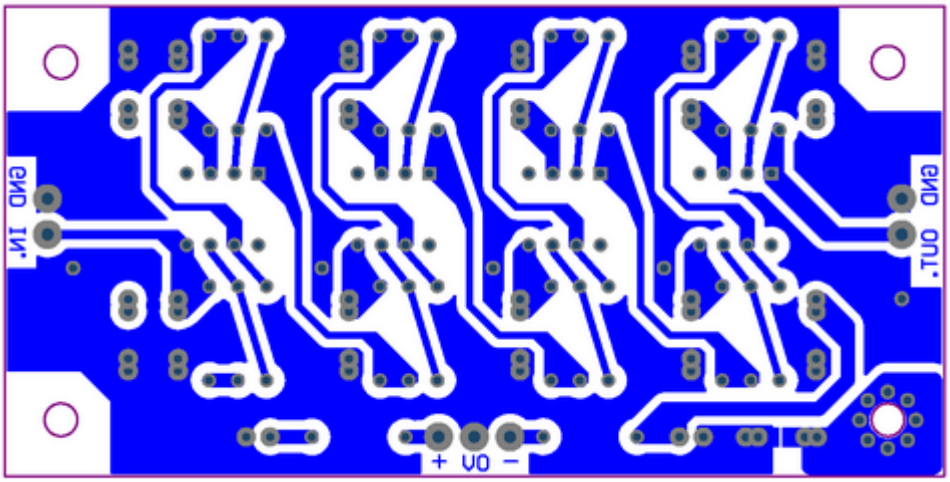

1 2 3
100uH
220uF/25V
100nF
100nF
VCC+
VCC-
100nF
Chassic
INPUT
OUTPUT
2 1
IC1 A
IC1 B
IC2 A
IC2 B
IC3 A
IC3 B
IC4 A
IC4 B
NJM072D
10K
47nF

PCB Layout:

Top Layer



Bottom Layer



Bill of Material:

Parts	Description	Position	Quantity
IC NJM072D	JRC OpAmp, DIP-8	U1-U4	4
R 10K ohm	Metal film 1%, 1/4W	R1-R24	24
C 47nF/100V	Polyester film, 5%	C1-C8	8
C 100nF/100V	Metallized Polyester film, 5%	C9-C12, C15	5
C 220uF/25V	Electrolytic capacitor, 20%	C13, C14	2
L 100uH	0307 Size Inductors, 10%	L1, L2	2
Terminal Block	2 Pin, Pitch 3.81mm	CN2, CN3	2
Terminal Block	3 Pin, Pitch 3.81mm	CN1	1
PCB	Fiber glass PCB, T1.6mm		1