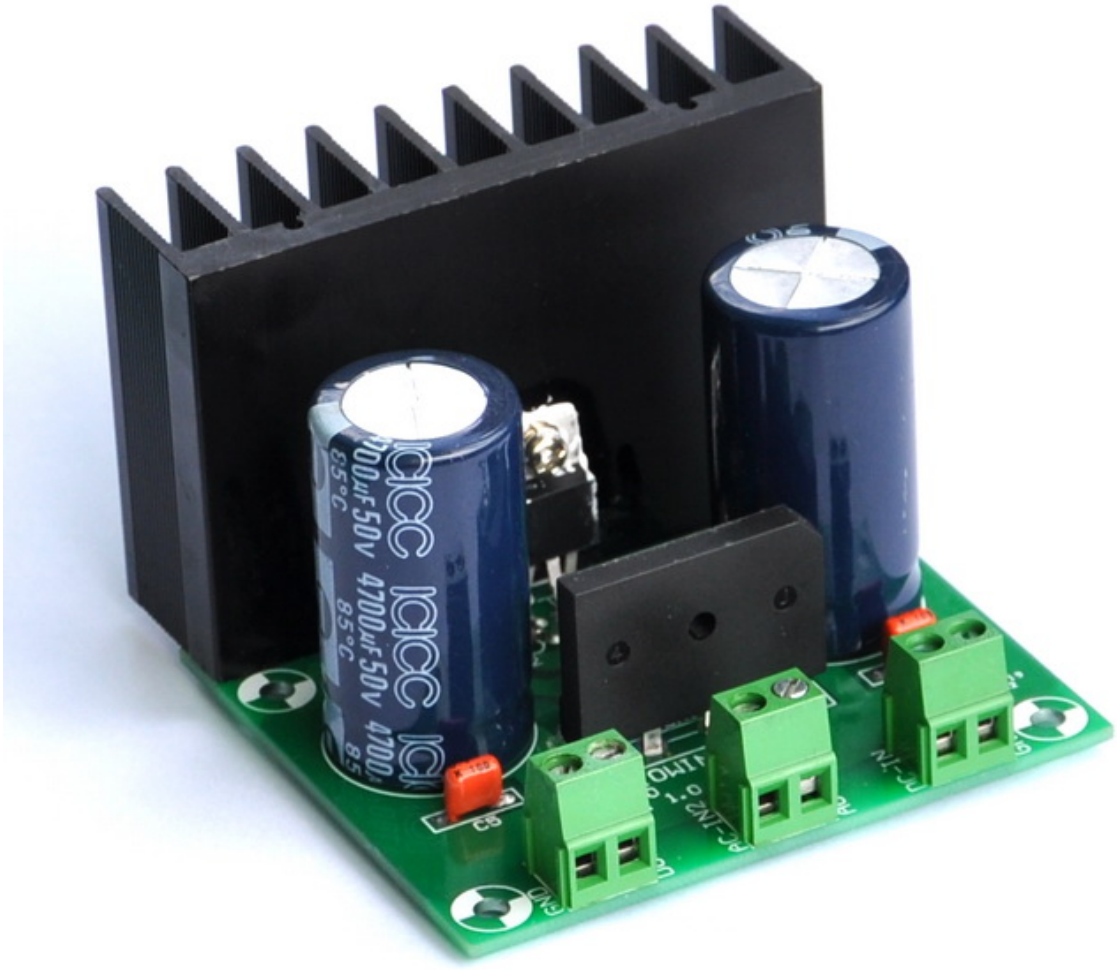
AudioWind
Electronics-Salon

SPECIFICATION

Model: A-210



Power Supply Board Based on National Semiconductor LM338T Regulator IC Design, AC or DC Input, DC Output.

LM338T Datasheet: http://www.national.com/ds/LM/LM138.pdf

Specifications:

Input Voltage	DC: 4 to 35V DC
	AC: 4 to 26V AC
DC Output Adjustable Range	1.5V to 32V
Initial Set Output Voltage	12V DC
Maximum Continuous Output Current	DC: 5 Amps ***1**
	AC: 3 Amps (Rectifier Without Heatsink) ***2**
	AC: 5 Amps (Rectifier With Heatsink) ***2**
Module Size	80 x 76.2 x 55 mm (L x W x H)
	3.15 x 3 x 2.2 inch (L x W x H)
IC Heat-Sink Size	22.5 x 50 x 76.2 mm
PCB Size	66 x 76.2 mm

Other electrical specifications, please read the LM338T datasheet.

Note:

*1: This module must be less than 25 watts itself power consumption, please calculate the power consumption:

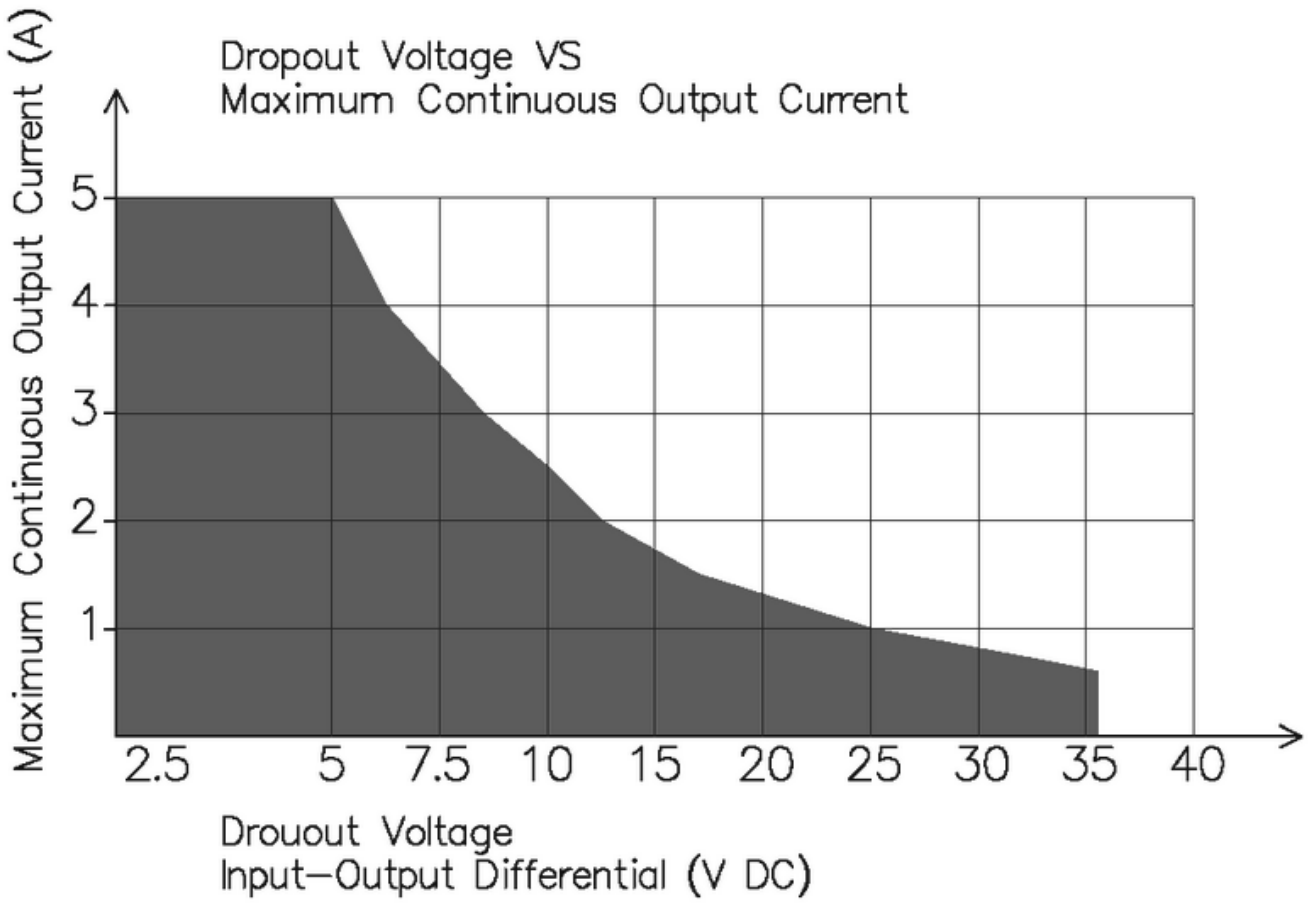
For DC Input: (VinDC - Vout) x Iout < 25 watts

For AC input: (((VinAC x 1.4) - 1.8) - Vout) x Iout < 25 watts

*2: This module no include bridge rectifier heatsink.

Caution: IC heatsink connected DC-Output.

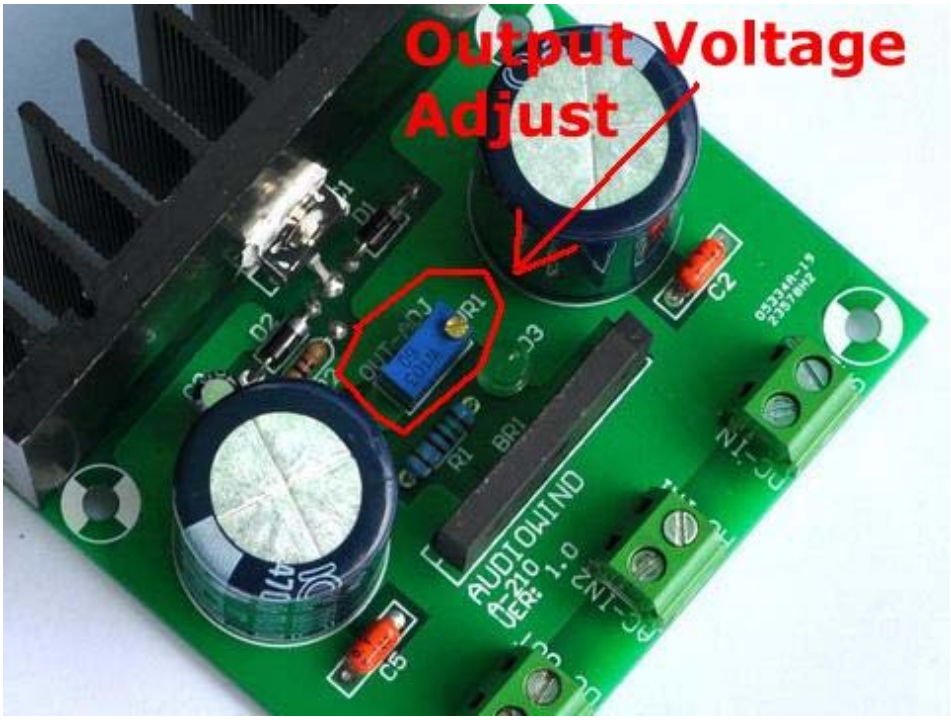
Module Dropout Voltage **VS** Maximum Continuous Output Current:



Input **VS** Output Range:

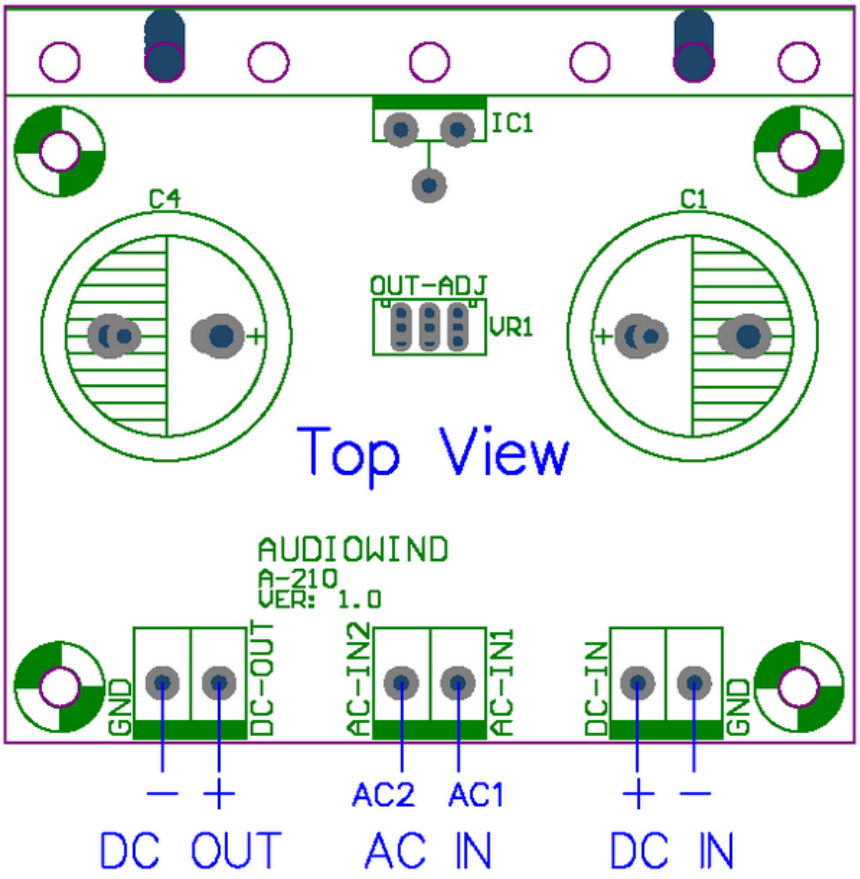
Input Voltage	**Output range adjustable**
DC 12V	1.5 to 9V DC
DC 18V	1.5 to 15V DC
DC 25V	1.5 to 22V DC
DC 35V	1.5 to 32V DC
AC 9V	1.5 to 8V DC
AC 15V	1.5 to 16.4V DC
AC 21V	1.5 to 25V DC
AC 26V	1.5 to 32V DC

Output Voltage Adjust:

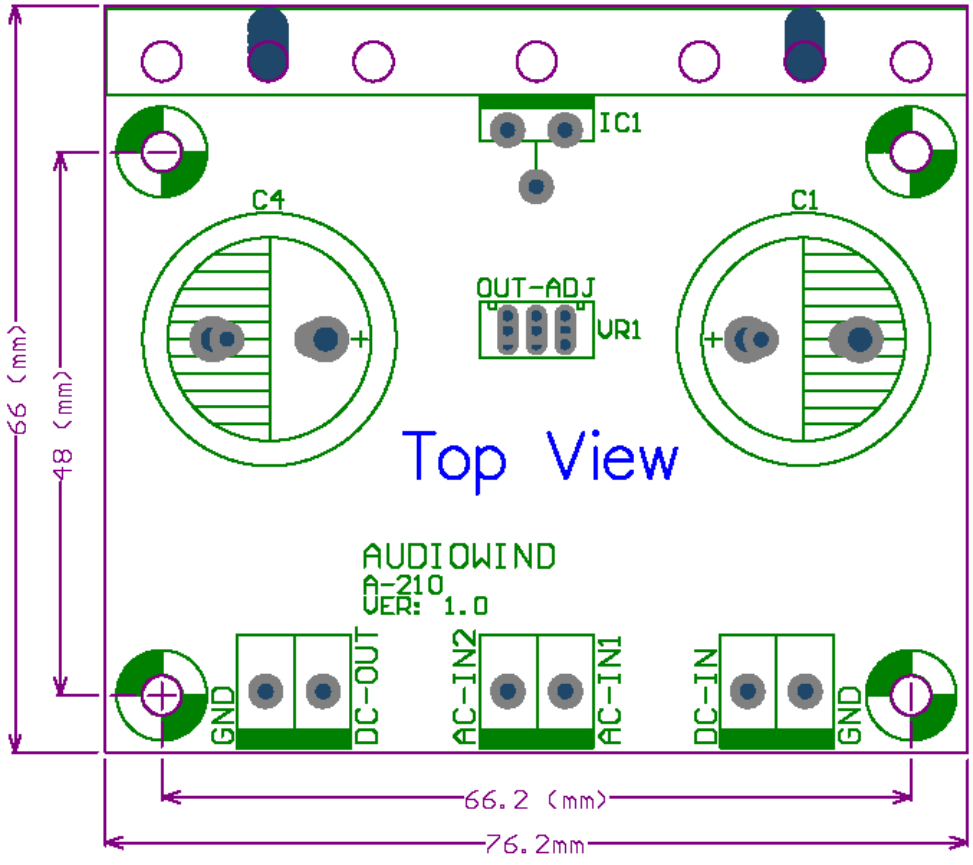


Output voltage adjust, use precision multiturn(28+-3 turns) trimming potentiometer, Clockwise to adjust voltage **DOWN**, Counterclockwise to adjust voltage **UP**.

Wiring diagram:

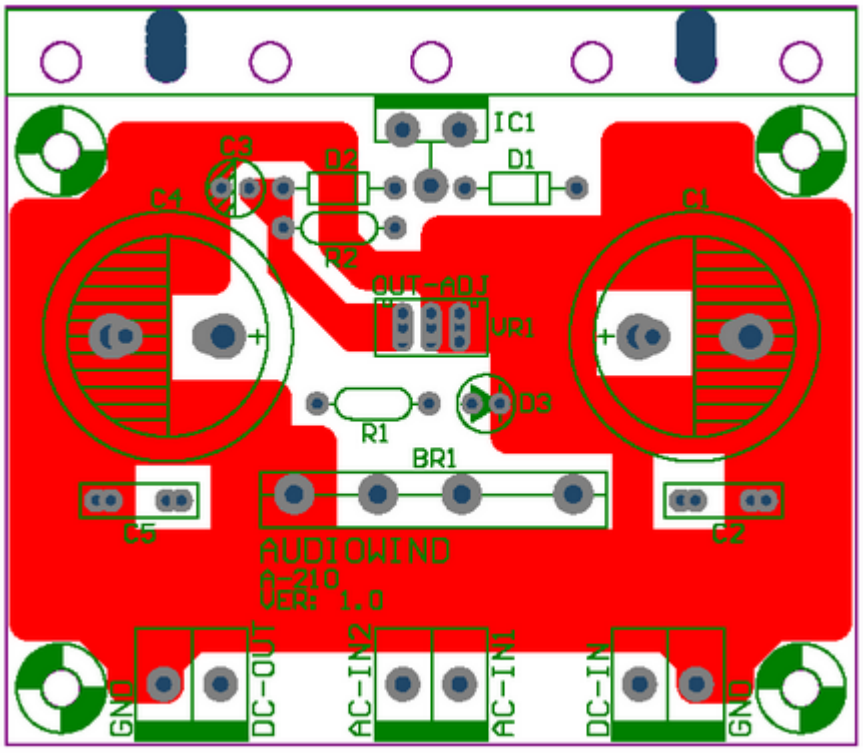


PCB Size:

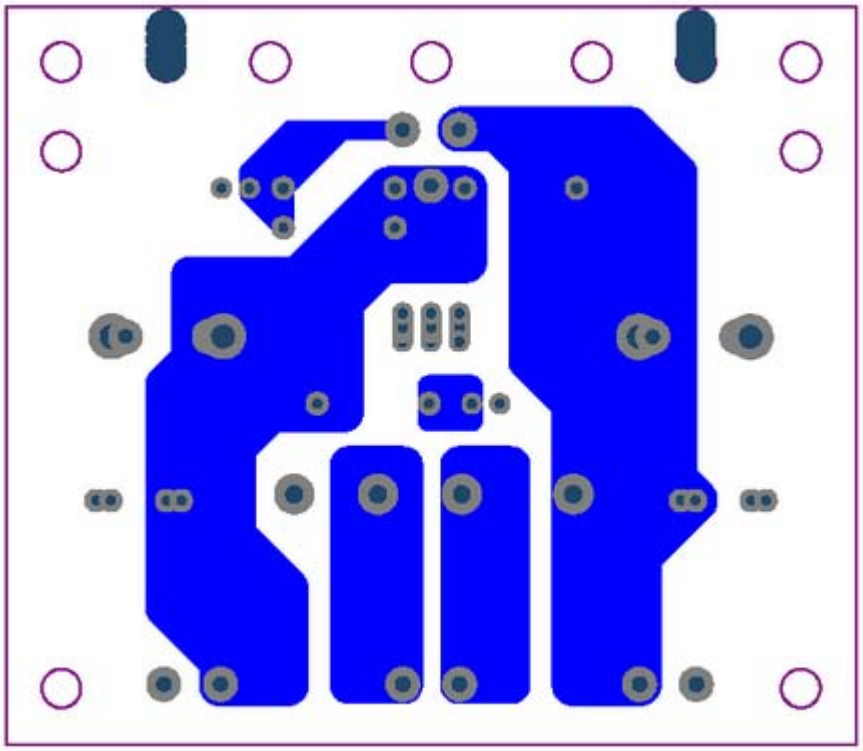


PCB Layout:

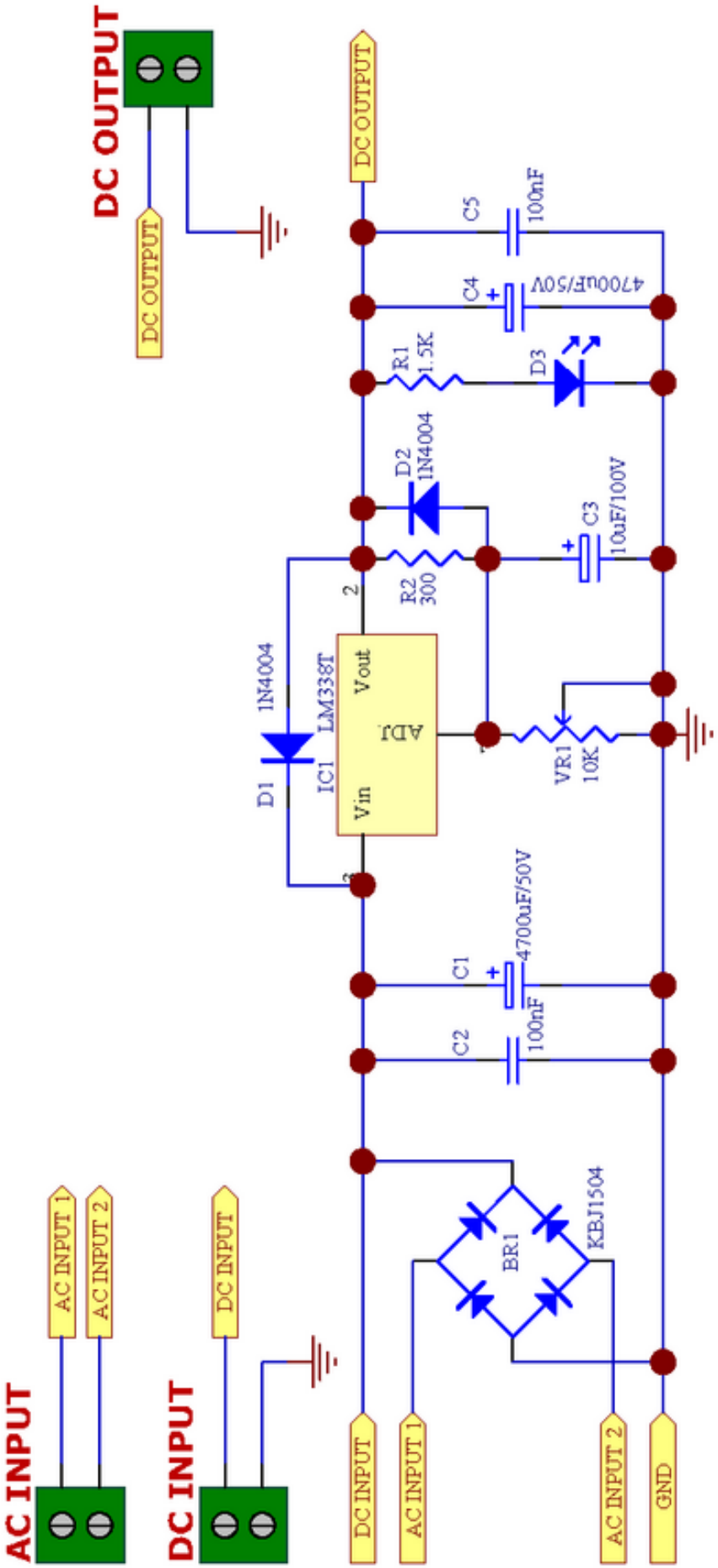
Top Layer



Bottom layer



Schematic:


DC OUTPUT
DC OUTPUT
DC OUTPUT
C5
100nF
C4
4700uF/50V
R1
1.5K
D3
D2
1N4004
C3
10uF/100V
R2
300
2
1N4004
LM338T
Vout
ADJ
IC1
Vin
D1
VR1
10K
C1
4700uF/50V
C2
100nF
BR1
KBJ1504
AC INPUT
AC INPUT 1
AC INPUT 2
DC INPUT
DC INPUT
DC INPUT
AC INPUT 1
AC INPUT 2
GND