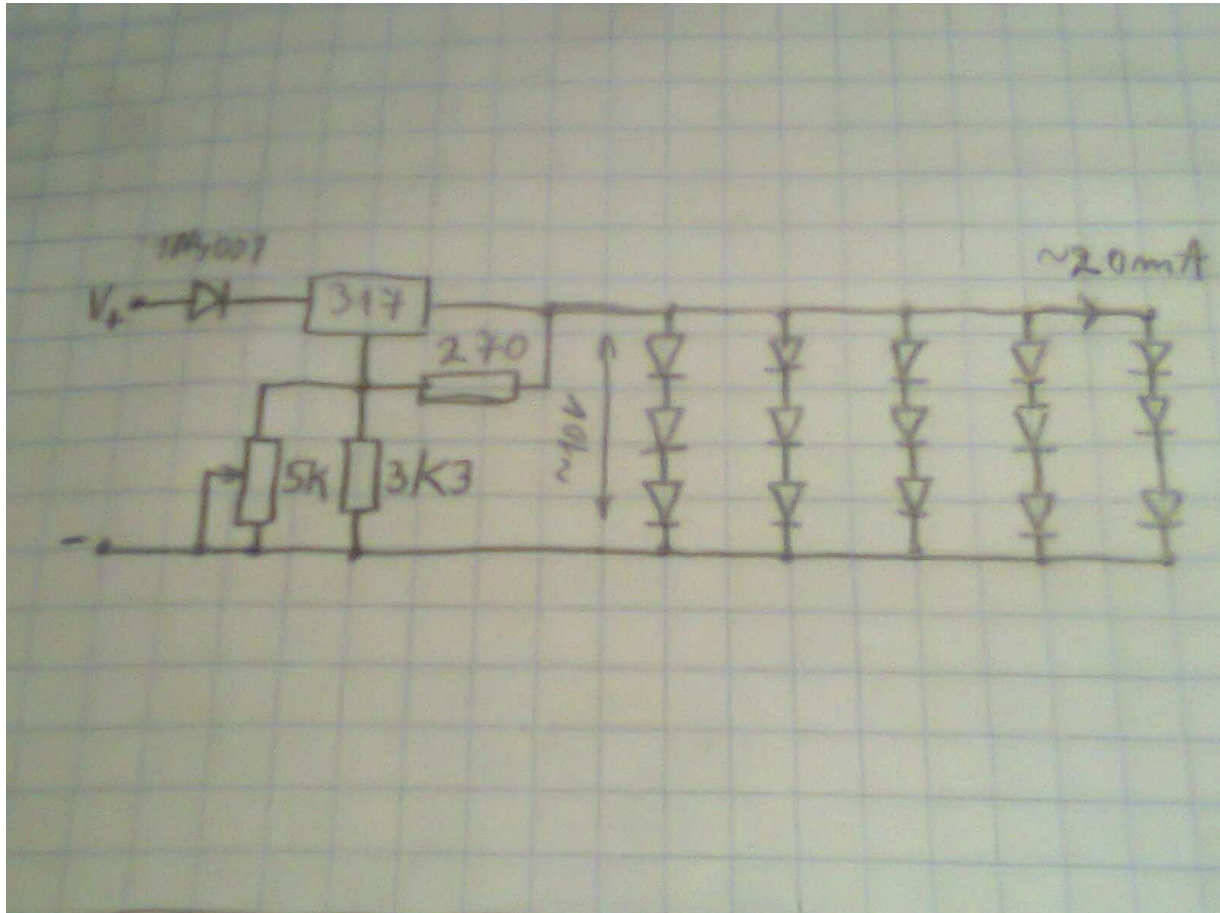


12 V dc. operated super bright white led torch

By Zsolt

Schematic:

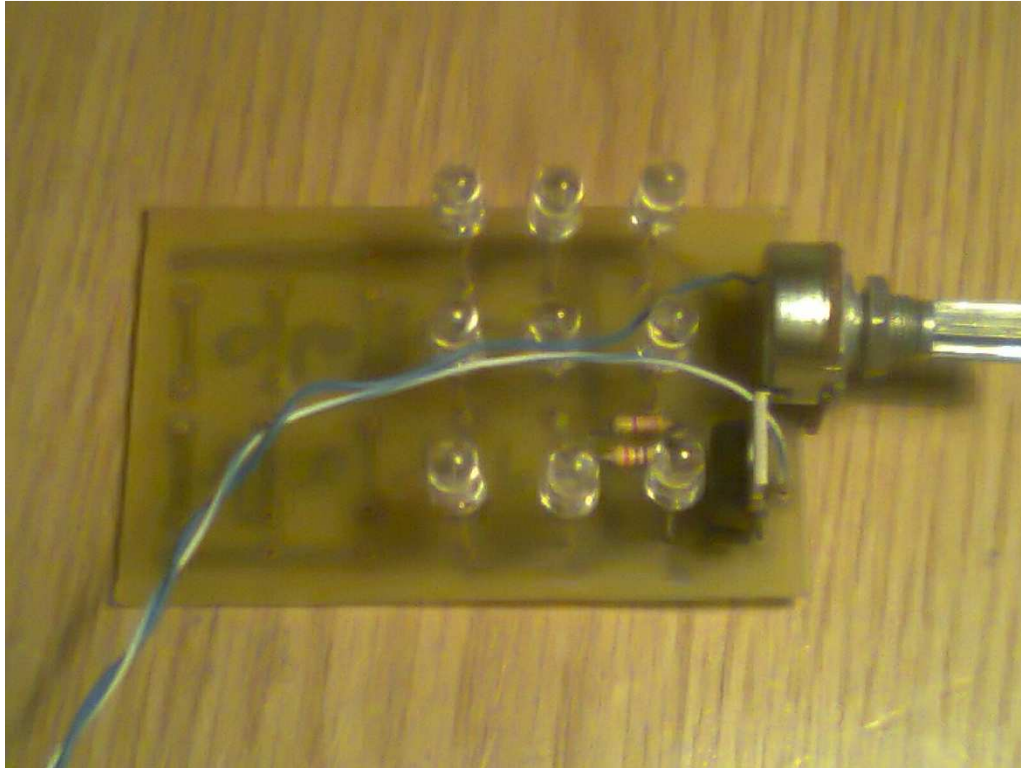


Parts:

- LM317 voltage regulator
- 1N4001 (diode used to prevent damage when misconnected to power supply)
- 270 ohm & 3.3 K ohm rezistor's
- 5 K ohm potentiometer (to adjust light intensity from zero to max)

- white led's (see datasheet attached)

Because LM 317 voltage regulator can go down to 1.25 V , there is no need for extra switch to turn off the light since at that voltage no led will conduct, so practically the circuit will be off .



18 white led's were included on the pcb, but I used only 9. I remarked that better dispersion of the led's on the board will improve the the efficiency, so I suggest a 1 inch distance between led's



To see more interesting things go to <http://www.et.utcluj.ro/zsolt/>

(My web page | 😊)