



- 12V – battery voltage, GND – car ground
- LED1 & LED2 (light emitting diodes) operate at 3.4 volts with a 20 milliamp current.
- ZD1 & ZD2 are 5.6 volt Zener diodes used to stabilize / buffer the low current voltage across the LED's from overvoltage.
- R1 & R2 are 431Ω ohm resistor providing a voltage drop across the LED's at 3.4 volts.
- D1 is a 0.056 μH inductor which causes the light to gradually brighten ON and gradually dim OFF.

LED Resistor Value, $R = (\text{supply voltage} - \text{LED voltage}) / \text{LED current}$