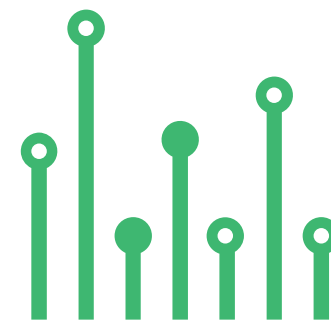


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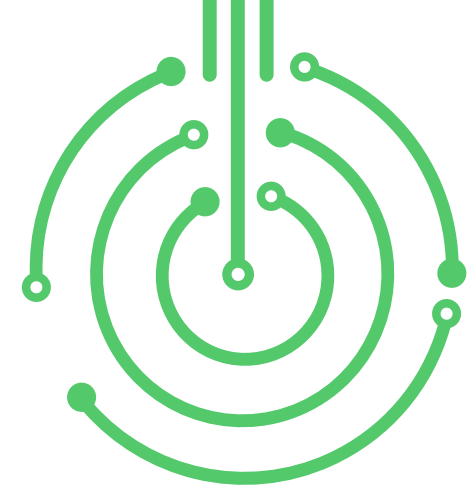
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AUTOMOTIVE



“ Lamp Flasher with Timer IC and MOSFET for Automotive Applications



SKU: EL148421

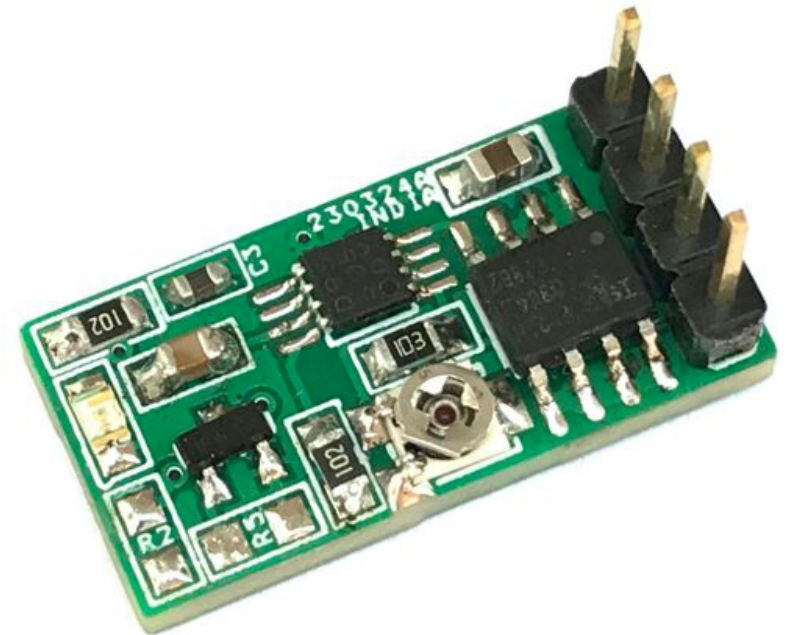
Lamp Flasher with Timer IC and MOSFET for Automotive Applications



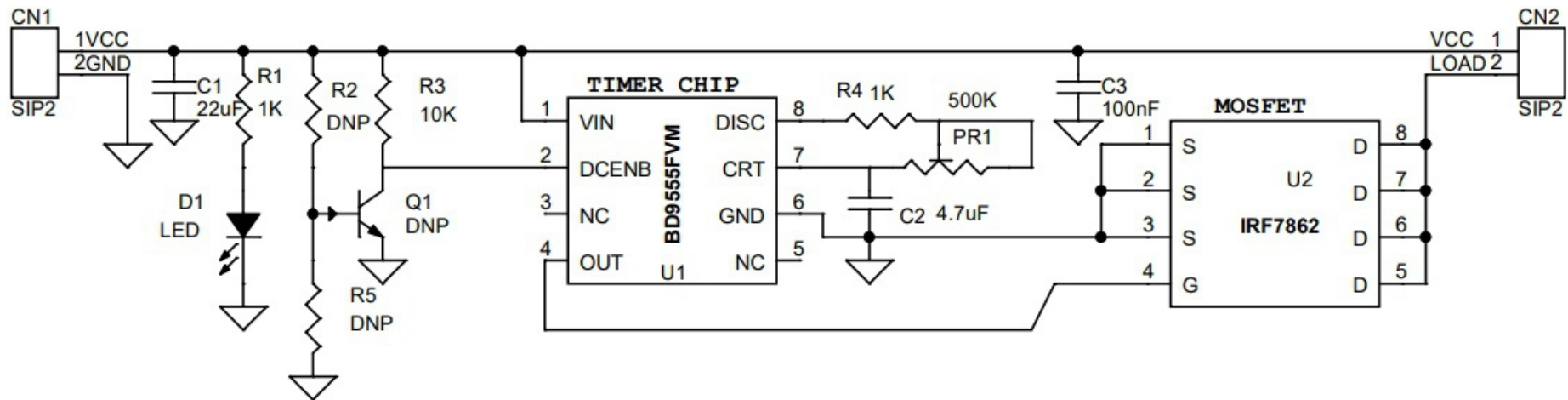
This is a mini flasher board that can drive high-power LED or a lamp, mainly designed for automotive applications. The project consists of BD9555FVM-C timer chip and MOSFET. The circuit is configured as a flasher, and can also be used as a PWM driver with an adjustable duty cycle and frequency. Capacitors C2, R4, and PR1 can be used to set the duty cycle. Please refer to the datasheet of BD9555FVM for more information. N-channel IRF7862 MOSFET used to drive the load, and it's advisable to use maximum load current 3A due to small thermal dissipation on PCB for the MOSFET. The operating power supply is 5V to 15VDC.

FEATURES

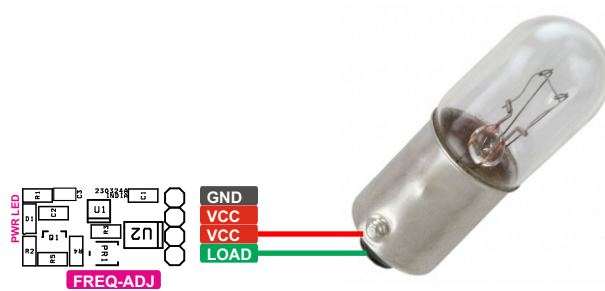
- Power Supply 5V to 15V DC
- Load Up to 3Amps
- Flash Frequency 2Hz to 10 Hz
- PWM Frequency range 1Hz to 10Khz (PR1, R4 and C2)
- Adjustable Duty Cycle 1% to 99% (PR1, R4 and C2)
- PCB Dimensions 22.07X10.95MM



Schematic



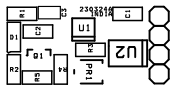
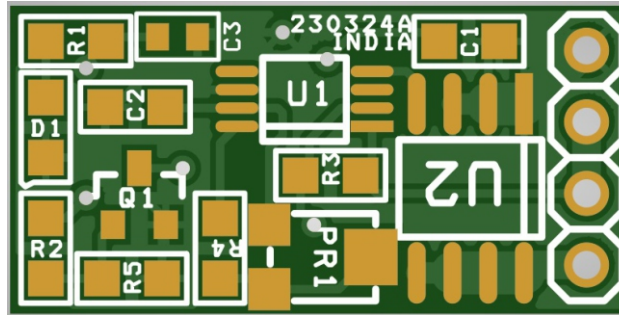
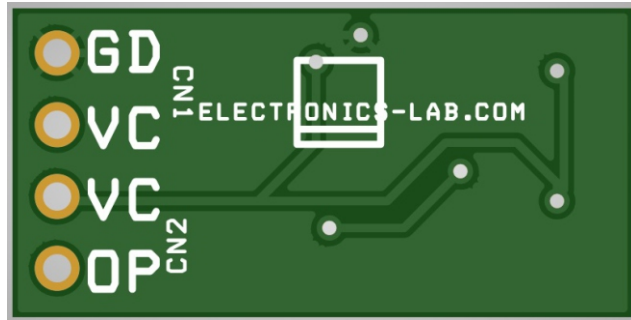
Connections



Connections

- CN1: Pin 1 = +DC 5V to 15V, Pin 2 = GND
- CN2: Pin 1 = +DC, Pin 2 = Load
- PR1: Frequency Adjust
- D1: Power LED

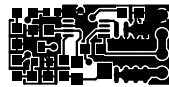
PCB



SILK SCREEN TOP



BOTTOM LAYER



TOP LAYER

PCB DIMENSIONS 22.07X10.95MM



Parts List

BOM						
NO	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	2	CN1,CN2	2 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5315-ND
2	1	C1	22uF/25V CERAMIC SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
3	1	C2	4.7uF/16V CERAMIC SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
4	1	C3	100nF/50V CERAMIC SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
5	1	D1	SMD LED SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
6	1	PR1	500K 3MM SMD TRIMMER POT	BOURNS	DIGIKEY	TC33X-2-504ECT-ND
7	3	Q1,R2,R5	DNP			
8	2	R1,R4	1K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
9	1	R3	10K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
10	1	U1	BD9555FVM MSOP8	ROHM	DIGIKEY	BD9555FVM-CGCT-ND
11	1	U2	IRF7862 SOIC8	INFINEON	DIGIKEY	IRF7862TRPBFCT-ND

Notes



APP

Android App

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Android App launched in 2017 and has 100k+ downloads - rated with 4.5 stars.

SCAN QR CODE





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electronics-lab
.com

info@electronics-lab.com
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