

Timer Power Switch

Onstate PEVDC module is a simple transistor-based voltage detector circuit that is setup as a delay ON/OFF timer. The output could be LEDs or a relay for power switching. It can also be used as a power switch. The small size using SMD components make it suitable for use in retro-fit with existing switches. The design is a simple, reliable circuit for many time delay/power applications such as a light switch (magnetic switch with PEVDC module) for drawers, closets, cabinets, and storage rooms where simple automatic operation is beneficial. Good lighting can reduce errors and time in finding what you need. If you forget to shut-off the lights, this circuit will automatically shut-off after time-out. The cost is reasonable and the installation time is less that watching a standard TV show. This board can be used for other time delay DIY projects.

Specifications (CIR-PEVDC):

Input voltage: 5-18VDC. Up to 30VDC (specific setup)
Current: 3A N-CH MOSFET out. 1A P-CH out

Timing: ~25s +/-2s at 12V

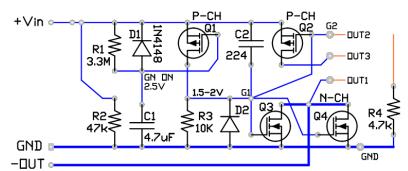
Switch: External N-CH MOSFET optional

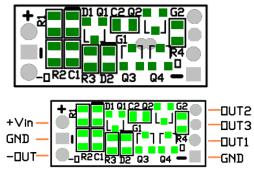
PCB: 1/16" FR4, 1oz Cu, Lead-free, HASL SMOBC

Plating: 2 layers PCB with through hole plating Size: 0.40"x0.95"+/-0.1" (10mmx24mm)

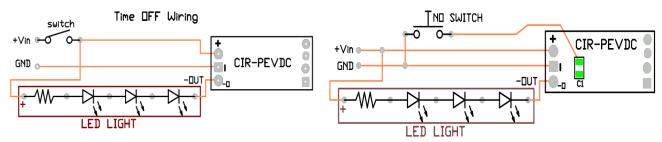
Thickness: 0.118" (3.0mm)
Pad Holes: 7x 35mil (0.89mm D)
Panel: 5x10 V-scored

Parts: 0805 and SOT-23 SMD





Notes: Q2, Q4 and R4 not soldered. OUT1/2 could connect to LED indicator and R4. Add Q4 for higher current operation. Add Q2 and wire to OUT3 for delay ON. Increase C1 for longer time delay.



1. Standard time delay wiring with NC switch. 2. One-touch delay wiring with NO push button switch. The standard time-delay starts once the switch is activated. One-touch delay starts once the switch is OFF (not activated). Re-activate switch to reset timing.