

DIMMER

DESCRIPTION

The PCA9532 is a 16-bit I2C-bus and SMBus I/O expander optimized for dimming LEDs in 256 discrete steps for Red/Green/Blue (RGB) color mixing and back light applications. The PCA9532 contains an internal oscillator with two user programmable blink rates and duty cycles coupled to the output PWM. The LED brightness is controlled by setting the blink rate high enough (> 100 Hz) that the blinking cannot be seen and then using the duty cycle to vary the amount of time the LED is on and thus the average current through the LED.

Specifications:

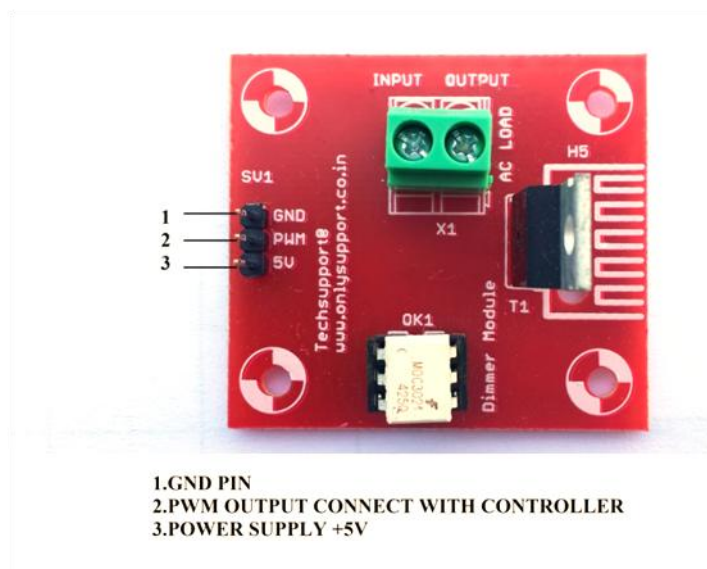
- Input Power
- 100-240VAC 50/60hz
- Output power
- 10A-120watts per channel @ 12V
- 10A-240watts per channel @ 24V

Features:

- 256 brightness steps
- Input/outputs not used as LED drivers can be used as regular GPIOs
- Internal oscillator requires no external components
- I2C-bus interface logic compatible with SMBus
- Internal power-on reset

- 16 LED drivers (on, off, flashing at a programmable rate)
- Two selectable, fully programmable blink rates (frequency and duty cycle) between
- 0.591 Hz and 152 Hz (1.69 second and 6.58 milliseconds)

IMAGE FOR DIMMER



APPLICATION

- Backlighting
- RGB Color Mixing
- Sensors Control
- Power Switches, Push-buttons
- Alarm Systems