

Universal High Brightness LED Driver

GENERAL DESCRIPTION

PT4207 is an AC/DC buck constant current driver for high power LED lighting applications. The IC uses a constant off-time control scheme. Both off time and peak LED current is externally programmed. The operating duty cycle can be as wide as 100% and it can power LED load from a 20V-450V power supply. The peak LED current compensation makes sure the LED current is stable within the overall input range.

The PT4207 integrates a 350mA low side switch. Besides, it provides EXT pin to drive external low side power switch to extend current capacity. The dedicated DIM input can accept either a 0.5V-2.5V analog dim signal or a PWM dim signal. Multi protection is integrated into PT4207 including output open/short circuit protection and soft over temperature protection. Built in soft start greatly reduces the inrush current during start up.

PT4207 is available in SOP8 package.

FEATURES

- Support 20VDC-450VDC input range application
- LED string up to hundreds of diodes
- Built-in 20V/350mA low side power switch
- Low side power switch extendable
- Up to 100% duty cycle
- 0.5V-2.5V analog dim and PWM dim acceptable
- Built in 4mS soft start
- LED string open/short circuit protection
- Soft over temperature protection

APPLICATION

- AC/DC LED lighting
- RGB Backlighting LED Driver
- Signal and Decorative LED lighting
- E27/PAR30/PAR38 power supplier

TYPICAL APPLICATION

