DESCRIPTION

PT6909 is a fixed frequency PWM controller IC designed to control high brightness LED driver using a single-stage PFC boost-buck topology. It can achieve a well power factor and a higher dc-bus voltage. This topology allows reducing the filter capacitors and using non-electrolytic capacitors to improve reliability. The PT6909 uses open-loop peak current control technique eliminates a need for loop compensation, limits the input inrush current, and is inherently protected from input under-voltage condition.

PT6909 provides a low frequency PWM dimming input that can accept an external control signal with a duty cycle of 0-100% and a frequency of between 100Hz and a few KHz. The PWM dimming capability enables PT6909 phase control solutions that can work with standard TRIAC.

FEATURES

- Simple power factor correction Integrated
- Low start-up current
- 8V to 12V input range
- Constant-current driver
- Programmable fixed frequency operation
- Input and output current sensing
- Input current limit
- Boost circuit over-voltage protection(LED open protection)
- Input voltage limitation
- Low Input current harmonic distortion
- PWM Low-frequency dimming and phase Dimming compatible

APPLICATIONS

- LED replacement tube
- AC/DC LED driver
- LED Lamp with phase dimmable
- Street lamps
- Traffic signals

BLOCK DIAGRAM