

GENERAL DESCRIPTION

The PT4209 is a flicker-free PWM/analog dimmable, primary side constant current controller which can achieve high power factor in a single stage converter, targeted to applications in solid state lighting. It is designed for the flyback topology, and regulates output current accurately without the secondary feedback loop.

PT4209 works in quasi-resonant mode for reducing the MOSFET switching losses. And extremely low start up current and the quiescent current helps to achieve high efficiency.

A complete set of integrated protection functions allows the PT4209 to protect against all fault conditions including: VCC under-voltage, VCC over-voltage, cycle by cycle current limit, output open/short circuit, Rcs short/open circuit and over temperature shut down.

The PT4209 is available in a SOP8 package.

FEATURES

- Constant Current Control Without Secondary Feed back
- Flicker-free PWM/analog Dimming
- Accurate Constant Current Output
- Quasi-Resonant Mode Operation
- Ultra-low (10uA) Start Up Current
- Low Quiescent Current (1mA)
- VCC Under Voltage Protection
- Over Voltage Protection by Voltage Holding
- Cycle by Cycle Current Limit
- Rcs Short/Open Circuit Protection
- Output Open/Short Circuit Protection
- Over Temperature Protection

APPLICATIONS

- Solid State Lighting
- Industrial and Commercial Lighting
- Residential Lighting

TYPICAL APPLICATION CIRCUIT

