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.

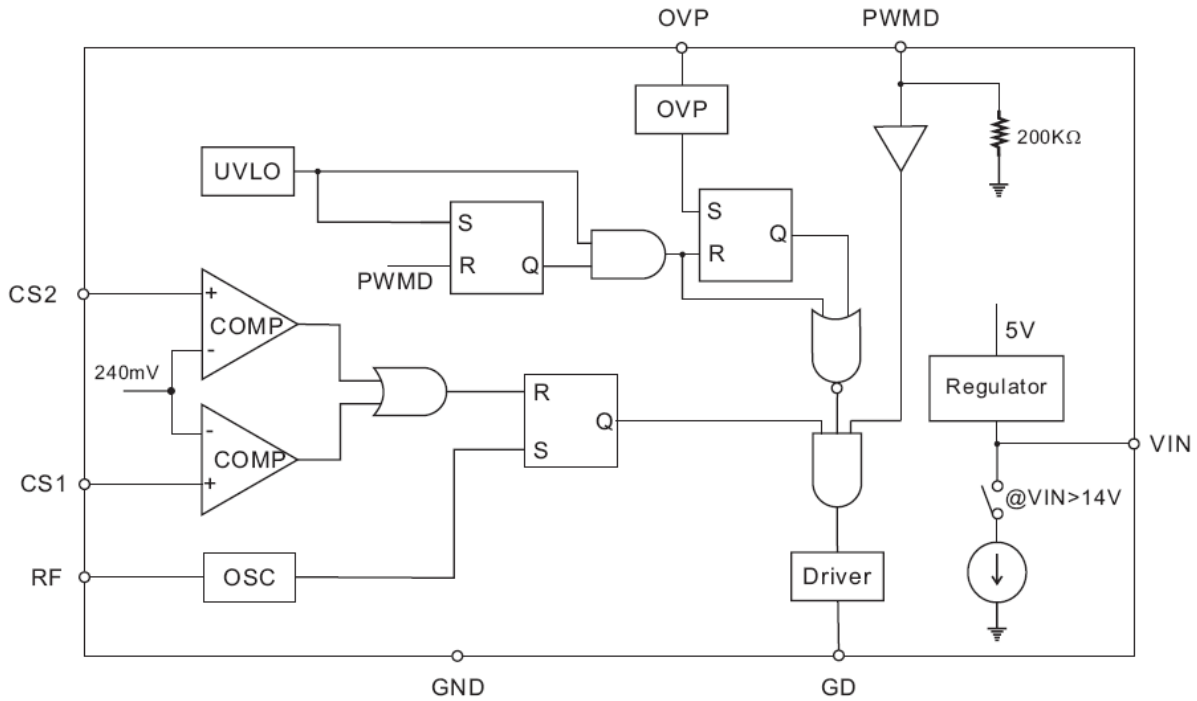
FEATURES

- 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

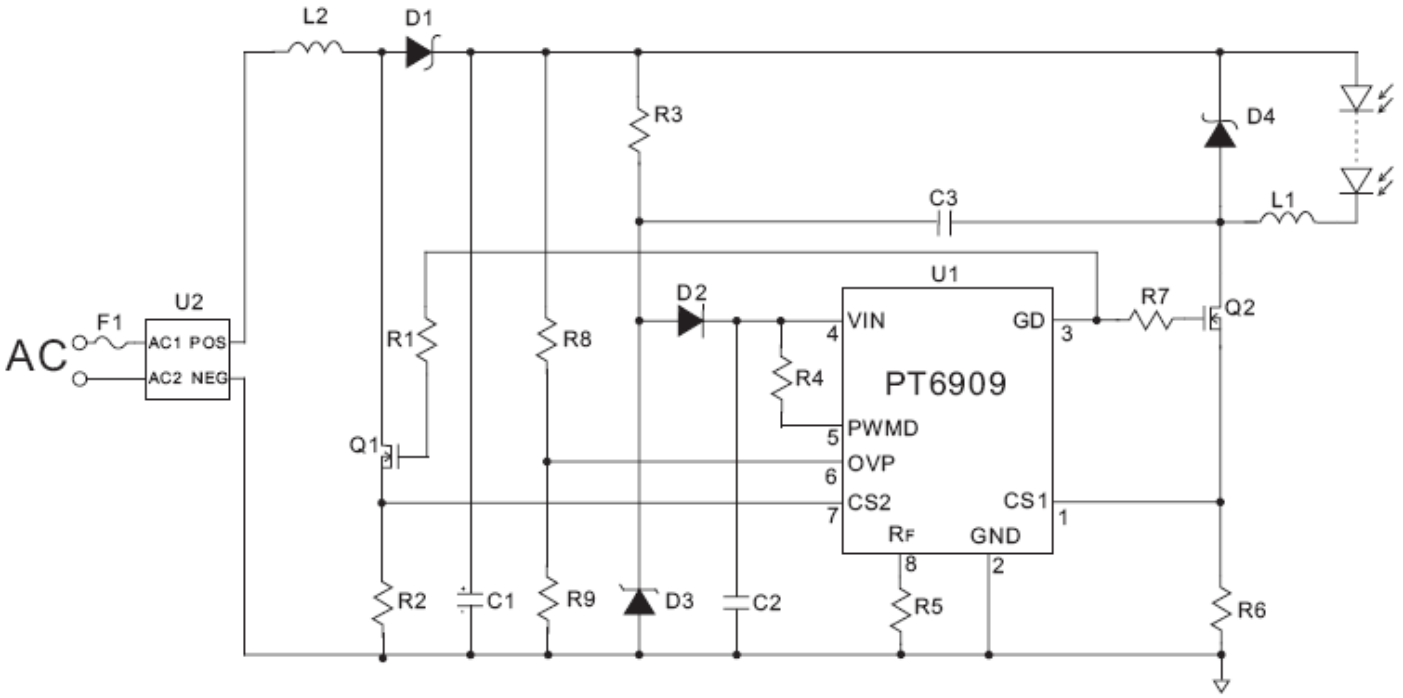
APPLICATIONS

- LED Replacement Tube
- AC/DC LED Driver
- LED Lamp with Phase Dimmable
- Street lamps
- Traffic signals

BLOCK DIAGRAM



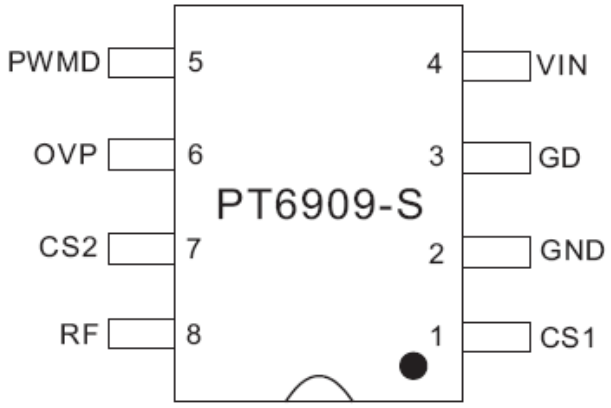
TYPICAL APPLICATION



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT6909-S	8 Pins, SOP, 150MIL	PT6909-S

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	Description	Pin No.
CS1	Input or Output Current Sense	1
GND	Ground	2
GD	Drives the Gate of External MOSFET	3
VIN	Input Voltage 8V-12V DC	4
PWMD	Low Frequency PWM Dimming pin, also Enable pin	5
OVP	Over Voltage Detection	6
CS2	Input or Output Current Sense	7
RF	Oscillator Frequency Setting	8

IMPORTANT NOTICE

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