DESCRIPTION

The PT6978L is a single-stage buck controller that achieves high power factor and accurate current for LED lighting applications. Integrated 650V MOSFET to decrease physical volume.

The PT6978L integrates APFC function and the high PF value is achieved by constant on-time operation mode. The PT6978L works in Quasi-Resonant switching mode, it can reduce the switching losses and improve the EMI performance.

The multi-protection features of PT6978L greatly enhance the system reliability and safety. The PT6978L provides input over voltage protection, short LED protection, open LED protection, over temperature protection, cycle-by-cycle current limiting, etc.

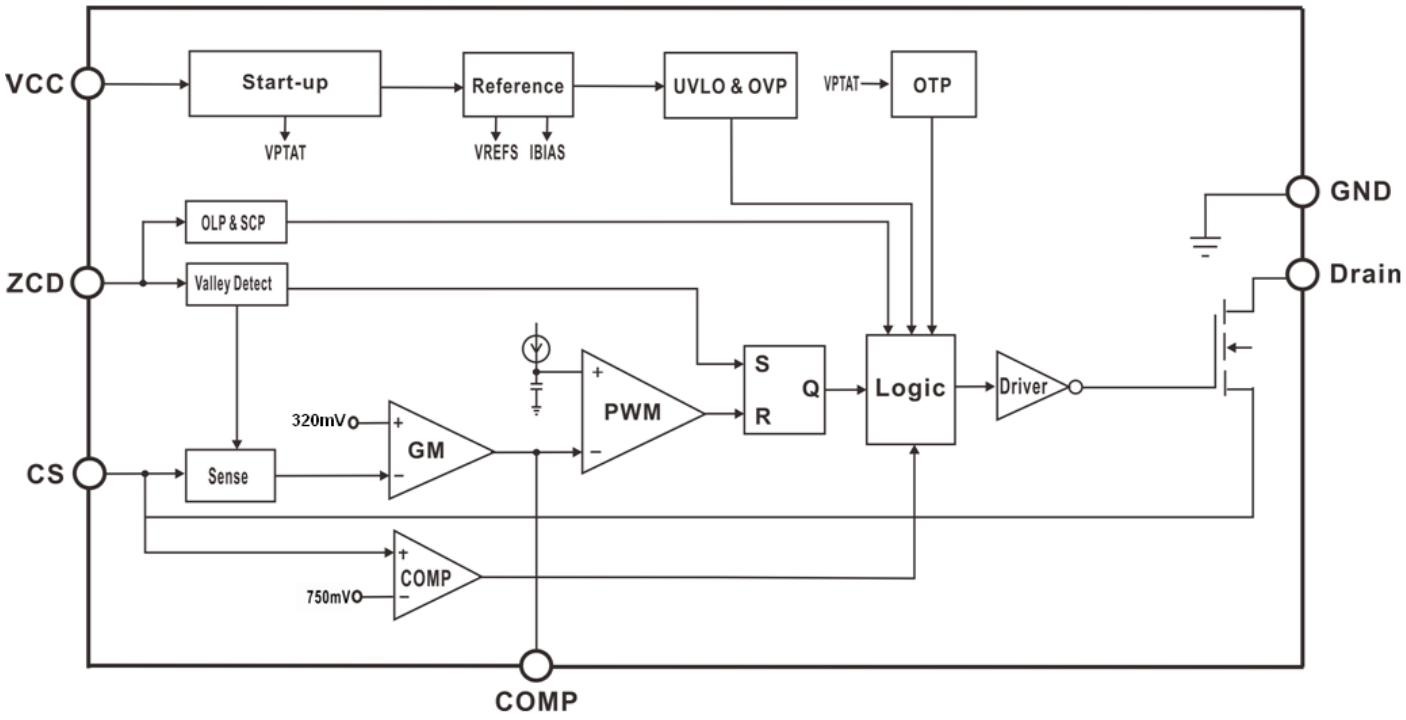
FEATURES

- Integrated 650V MOSFET.
- High PF≥0.9 with single stage conversion.
- Real-current control technique achieves accurate constant LED current.
- Quasi-Resonant switching mode to achieve low switching losses.
- ±3% output current accuracy.
- Excellent line regulation and load regulation.
- Low start-up current: 15μA typical.
- Reliable short LED and open LED protection.
- System auto-restart function.
- VCC over voltage protection.
- VCC under voltage protection (UVLO).
- Cycle by cycle current limiting.
- Over temperature protection (OTP).
- SOP-7 package.

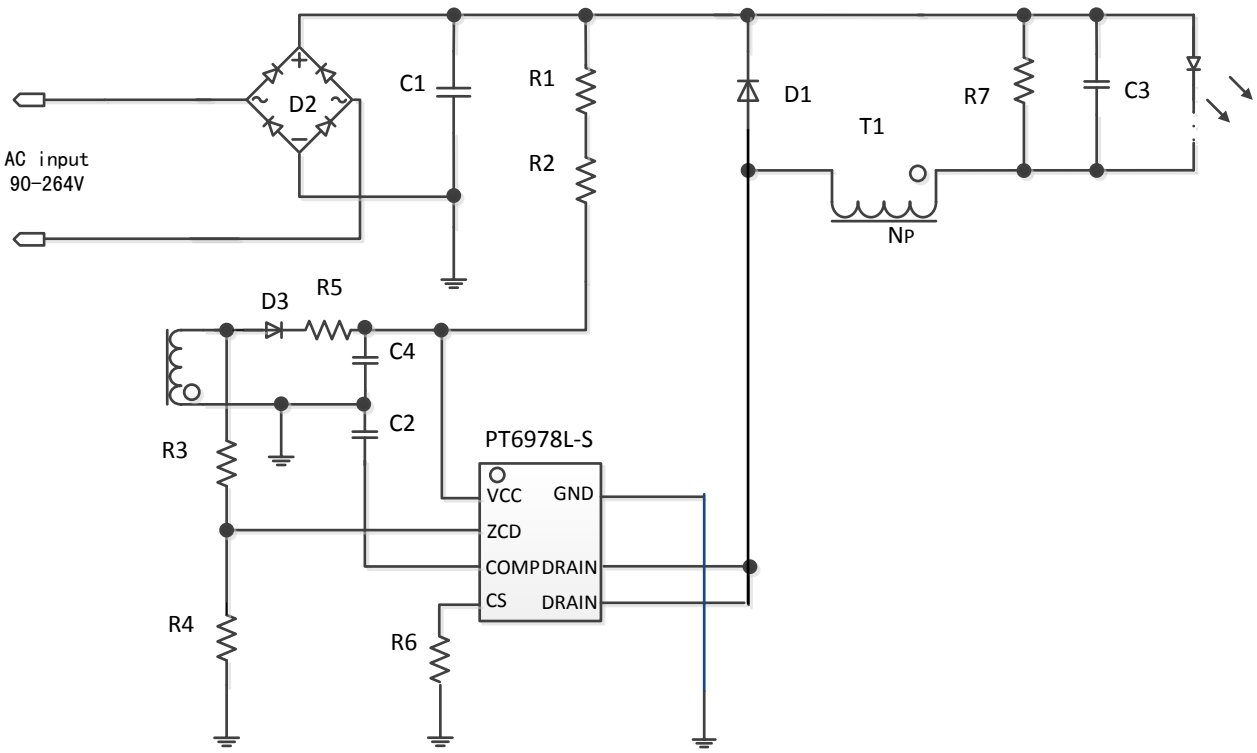
APPLICATIONS

- GU10, E27 LED Bulb lamp.
- Others Led Lighting.

BLOCK DIAGRAM



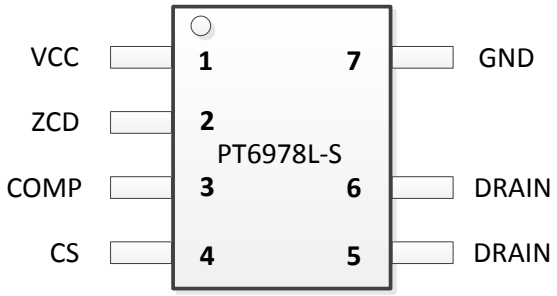
TYPICAL APPLICATION



ORDERINFORMATION

Valid Part Number	Package Type	Top Code
PT6978L-S	7 Pins, SOP	PT6978L-S

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	Description	Pin No.
VCC	Power supply pin.	1
ZCD	Inductor current zero-crossing detection pin. This pin also provides over voltage protection, short circuit protection and line regulation modification function.	2
COMP	Loop compensation pin.	3
CS	Current sense pin. Connect the sense resistor between this pin and the GND pin.	4
DRAIN	Drain of the internal power MOSFET.	5/6
GND	IC Ground.	7

IMPORTANT NOTICE

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Princeton Technology Corp.
2F, 233-1, Baociao Road,
Sindian Dist., New Taipei City 23145, Taiwan
Tel: 886-2-66296288
Fax: 886-2-29174598
http://www.princeton.com.tw