

DESCRIPTION

The PT6983A is a non-isolated buck and applicable to 85V AC ~ 265V AC input voltage range for LED lighting.

The PT6983A integrates high precision current detection and constant current circuit, realizes high precision LED constant current and excellent line voltage regulation. The PT6983A works in CRM mode, the LED current is constant with inductance and LED output voltage change, good load regulation.

The PT6983A integrates a 500V power MOSFET, uses the source driver architecture, with a low operating current, so the PT6983A doesn't need the auxiliary winding for sensing the output current and supplying the chip. It has a few external components, saves the cost and volume system.

The multi-protection features of PT6983A greatly enhance the system reliability and safety. The PT6983A provides CS resistance short-circuit protection, short LED protection, open LED protection, VIN under voltage protection, temperature intelligent control, etc.

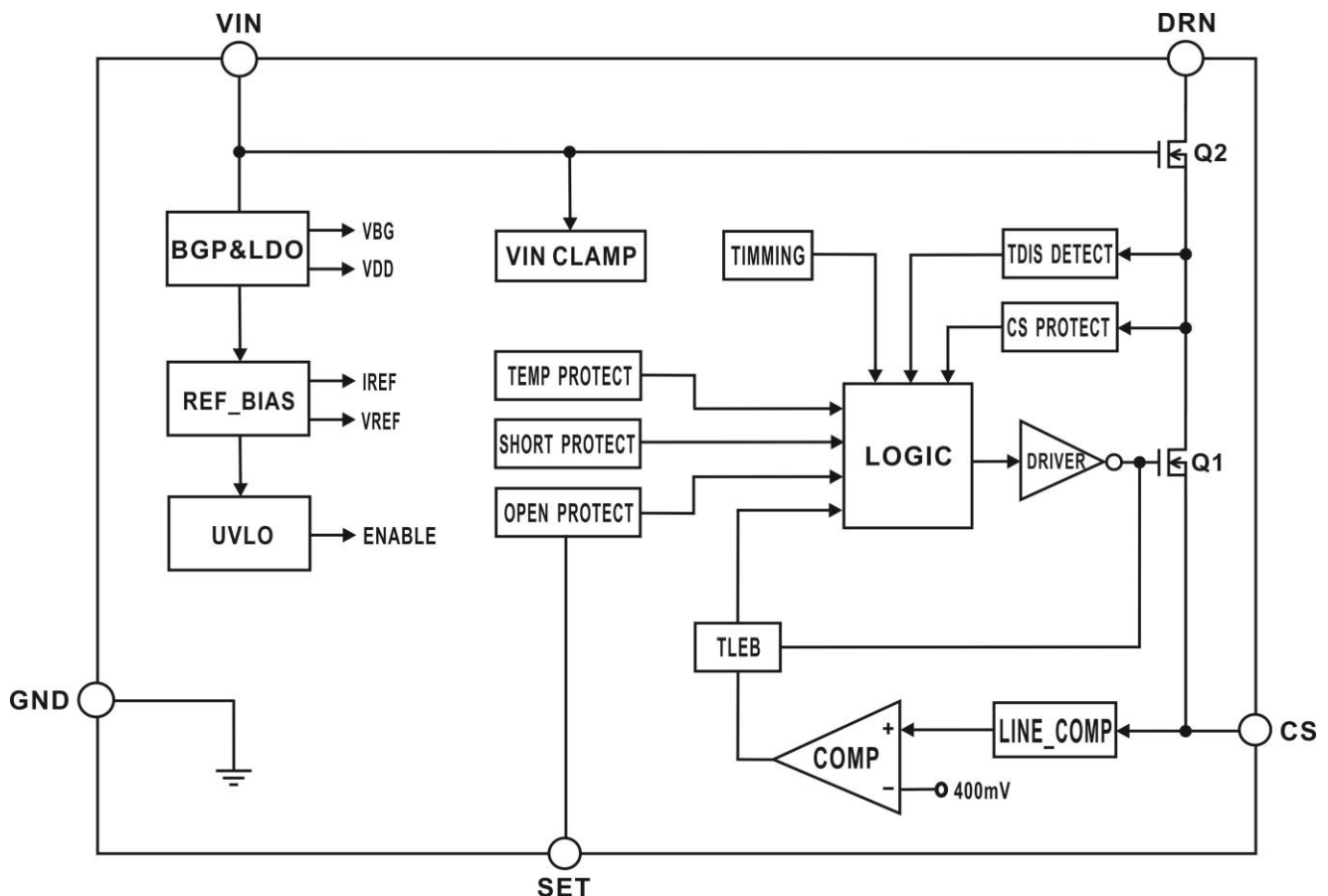
FEATURES

- Integrates 500V Power MOSFET
- CRM Mode
- No Auxiliary Winding for Sensing and Supplying
- Low Operating Current
- Universal Input Voltage Range
- $\pm 5\%$ Output Current Accuracy
- LED Open/Short Circuit Protection
- VIN Under Voltage Protection
- CS Resistor Short Circuit Protection
- Temperature Intelligent Control
- System Auto-Restart Function
- SOP-8 Package

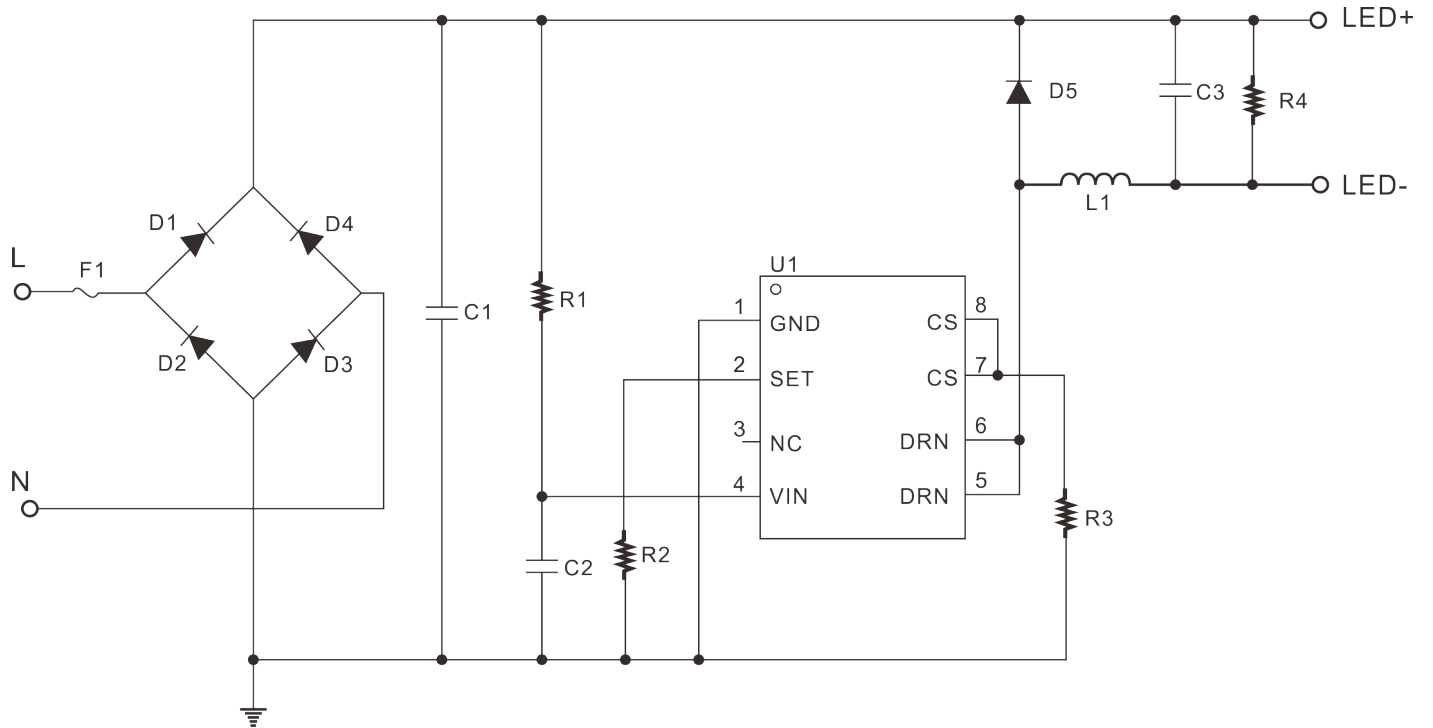
APPLICATIONS

- LED Bulb lamp, LED PAR lamp
- LED Tube lamp
- Other LED lighting

BLOCK DIAGRAM



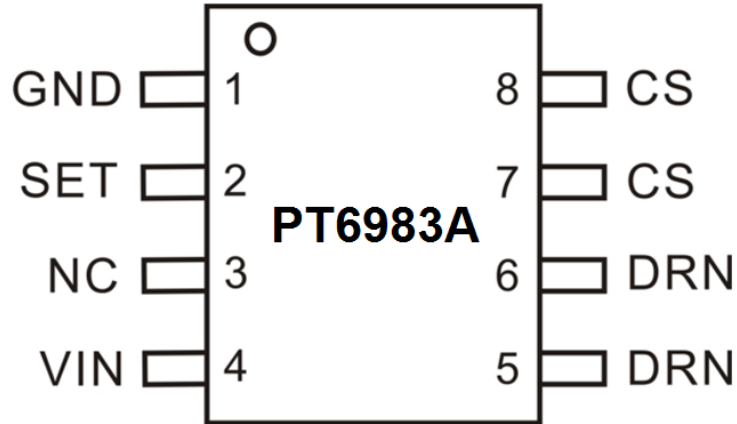
TYPICAL APPLICATION



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT6983A-S	8-Pin, SOP	PT6983A-S
PT6983A-D	8-Pin, DIP	PT6983A-D

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	Description	Pin No.
GND	Ground	1
SET	LED open-circuit voltage protection Settings, by connecting the resistance to the ground	2
NC	No connection	3
VIN	Power supply pin	4
DRN	Power MOSFET Drain	5,6
CS	Current sense pin, sense the inductor current while the switch is on-state.	7,8

IMPORTANT NOTICE

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PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

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>