

## DESCRIPTION

The PT6911 is ideally suited for AC/DC buck LED driver with external MOSFET. Since the PT6911 includes a 12V~450V linear regulator which allows it to work from a wide range of input voltages without the need for an external low voltage supply. Besides, the PT6911 operates in hysteretic control mode; the controller achieves good output current regulation without the need for any loop compensation. The PT6911 delivers constant current within high accuracy to a wide variety and number of series connected LEDs.

The PT6911 includes PWM dimming and linear dimming functions. The PWM dimming input can accept an external control signal with a duty cycle of 0~100% and a frequency between 100Hz and a few KHz. Output current to LED string can be programmed to any value between 0 to its maximum value by PWM dimming. Also, a 0.1~1.2V linear dimming input can be used for linear dimming of the LED current.

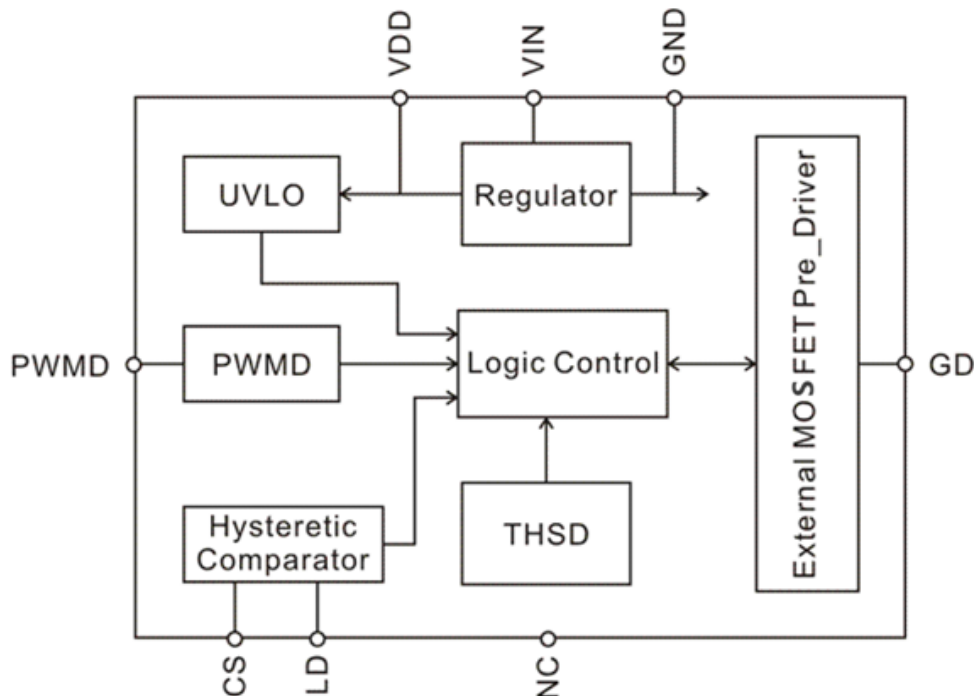
## FEATURES

- Wide Input Voltage: 12V ~ 450V DC
- Hysteretic controller
- $\pm 5\%$  Output Current Accuracy
- Low Stand-by Power Dissipation
- Soft Start
- PWM Low-frequency Dimming and Linear Dimming
- Thermal Shutdown 160°C Typical
- SOP-8 Package

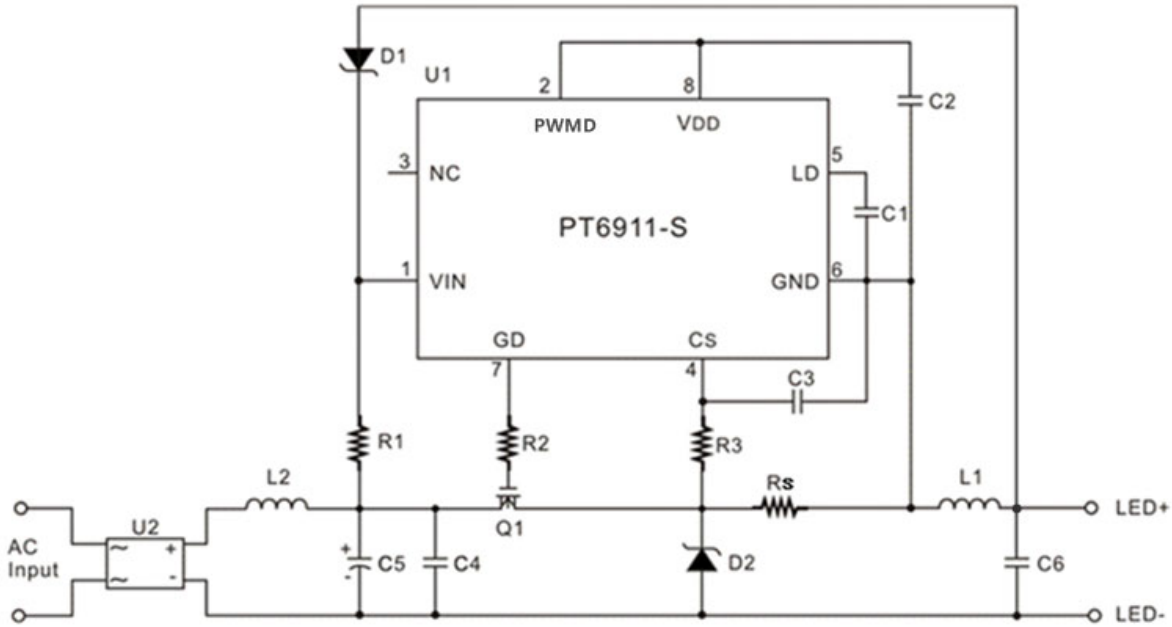
## APPLICATIONS

- AC/DC LED Driver
- LED Bulbs
- Constant-Current driver

## BLOCK DIAGRAM



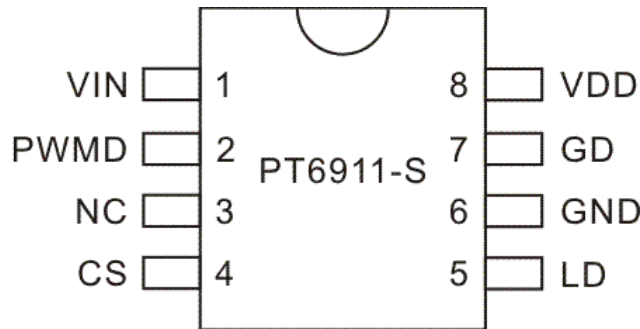
## TYPICAL APPLICATION



## ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT6911-S	8 Pins, SOP, 150MIL	PT6911-S

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	Description	Pin No.
VIN	Input supply voltage, 12V~450V DC.	1
PWMD	Low frequency PWM dimming pin, also enable pin. When PWMD pin is floating or is pulled to GND, IC operates in stand-by mode. When PWMD pin is pulled to high, IC operates normally.	2
NC	No connection.	3
CS	Current sense pin.	4
LD	Linear dimming with 0.1~1.2V DC input to set the current sense threshold voltage.	5
GND	IC ground.	6
GD	IC output drives external MOSFET.	7
VDD	Internal regulated voltage output pin. It must be bypassed with a low ESR capacitor to GND.	8