

### Description

The BP5609 is a LED current ripple remover, working with single-stage active PFC LED driver to remove the low frequency LED current ripple and the low frequency flicker.

The BP5609 utilizes patented high efficiency control scheme. It can automatically adapt to wide range LED voltage and current, removing the LED current ripple while keeping the MOSFET power loss to be minimum.

The BP5609 offers over temperature protection and VCC UVLO protection.

### Features

- High Efficiency
- Adapt to All Kinds of Single Stage APFC LED Driver
- Simple Circuit
- No Magnetic Components
- Wide Range LED Voltage
- Wide Range LED Current
- VCC Under Voltage Protection
- Over Temperature Protection
- Available in SOT23-6 Package

### Applications

- T8/T10 LED String
- GU10/E27 LED Bulb, Spot Light
- LED Ceiling Light
- Other LED Lighting

### Typical Application

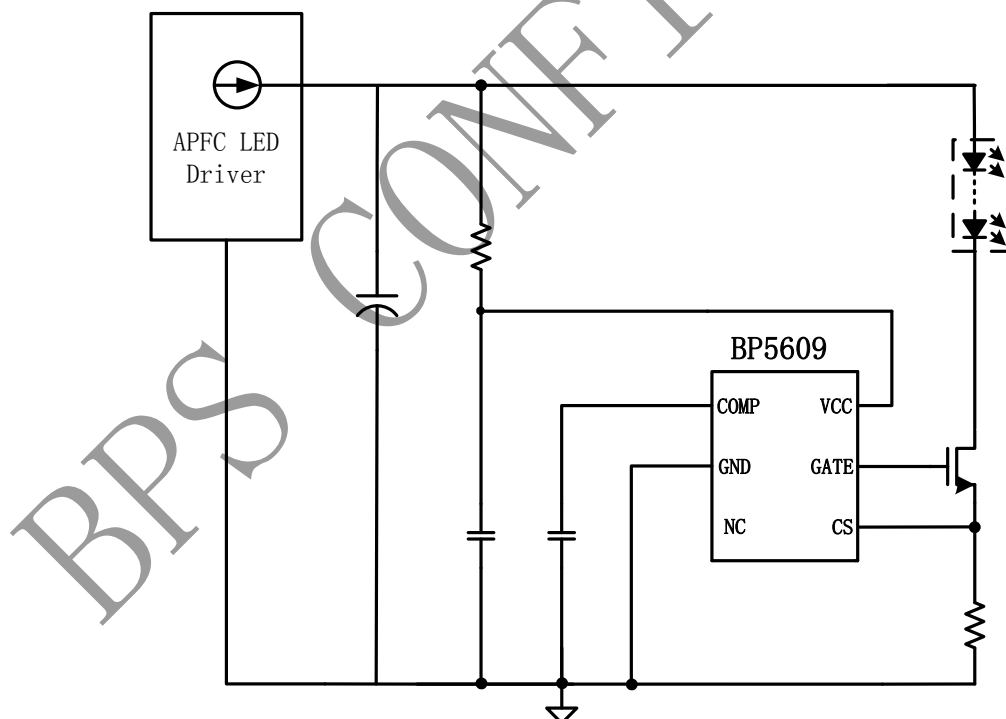


Figure 1. Typical application circuit for BP5609



晶丰明源半导体

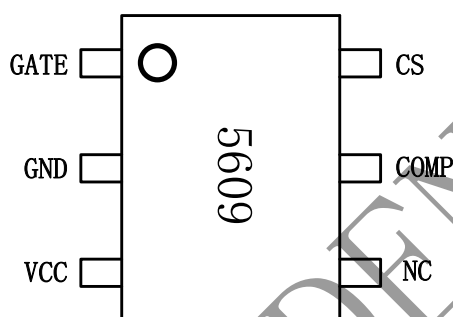
# BP5609

## LED CURRENT RIPPLE REMOVER

### Ordering Information

Part Number	Package	Operating Temperature	Packing Method	Marking
BP5609	SOP23-6	-40 °C to 105 °C	Tape 3,000 Piece/Reel	5609

### Pin Configuration and Marking Information



### Pin Definition

Pin No.	Name	Description
1	GATE	Gate Driver Pin. Connect this pin to the gate of external power MOSFET.
2	GND	Ground.
3	VCC	Power Supply Pin. Connect a bypass capacitor from this pin to GND.
4	NC	No Connection.
5	COMP	Loop Compensation Node. Connect a capacitor from this pin to GND.
6	CS	Current Sense Pin. Connect a resistor to GND to sense the LED current.