

### Description

The BP3218 is a high efficiency TRIAC dimmable LED driver. The device operates in critical conduction mode and is suitable for buck, buck-boost or fly-back LED lighting.

The BP3218 utilizes patent pending MOSFET driving technique and current sensing method. The operating current of the IC is very low. With very few external components count, it can achieve excellent constant current performance, so the system cost and size are greatly reduced.

The BP3218 offers rich protection functions to improve the system reliability, including LED open circuit protection, LED short circuit protection, VCC under voltage protection, CS resistor short circuit protection and thermal regulation function.

The BP3218 is available in a SOP8 Package.

### Features

- TRIAC dimmable
- Critical Conduction Mode Operation
- Ultra Low Operating Current
- $\pm 5\%$  LED Output Current Accuracy
- LED Open Protection
- LED Short Protection
- Current Sensing Resistor Short Protection
- VCC Under Voltage Protection
- Thermal Regulation Function
- Available in SOP8 Package

### Applications

- LED Candle Light
- LED Bulb
- Other LED Lighting

### Typical Application

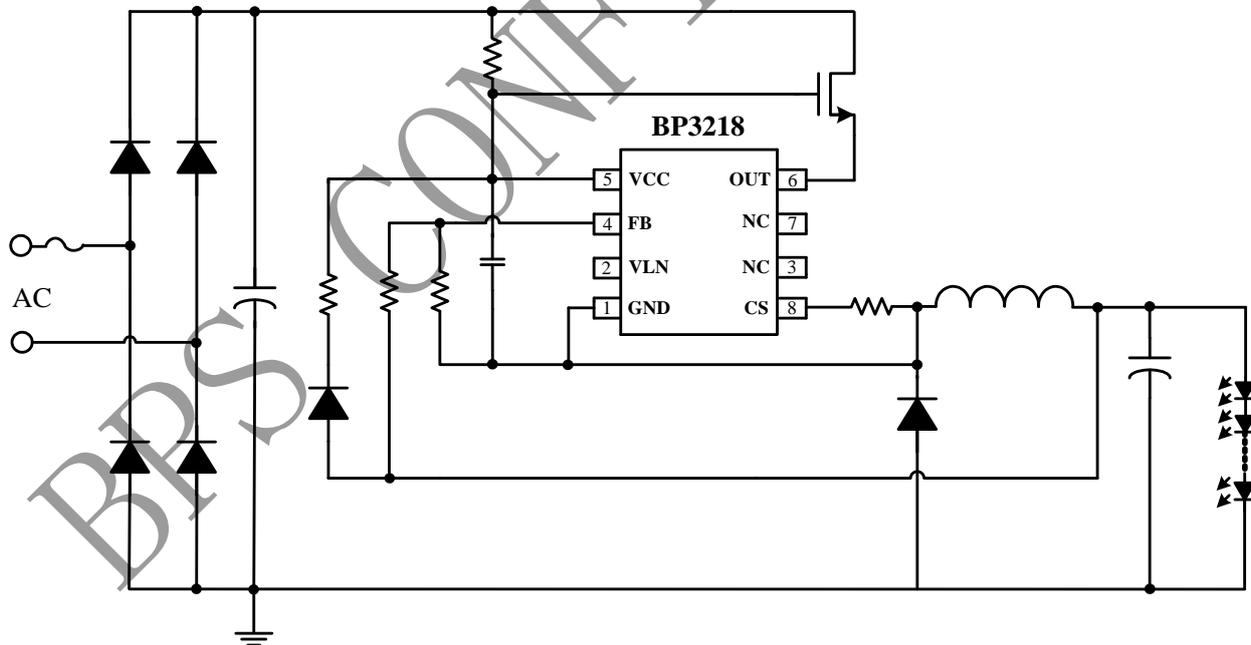


Figure 1. Typical application circuit for BP3218 (Buck)

### Ordering Information

Part Number	Package	Operating Temperature	Packing Method	Marking
BP3218	SOP8	-40 °C to 105 °C	Tape 4,000 Piece/Roll	BP3218 XXXXXY XXY

### Pin Configuration and Marking Information

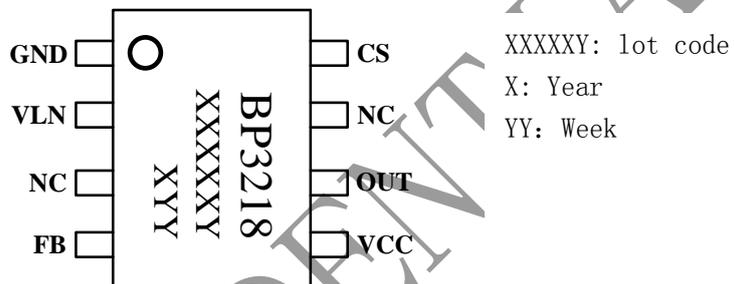


Figure 2. Pin configuration

### Pin Definition

Pin No.	Name	Description
1	GND	Ground
2	VLN	Line Voltage Detecting Pin
3,7	NC	No Connection. Float or connect to GND.
4	FB	Over Voltage Protection Detecting Pin.
5	VCC	Power Supply Pin
6	OUT	Driver Output Pin. Connect to the source of the external power MOSFET.
8	CS	Current Sense Pin. Connect a sensing resistor between this pin and GND pin.