

## **Boost PFC CC LED Driver**

#### Description

The BP2618 is a high efficiency LED driver. The device operates in critical conduction mode and is suitable for Boost LED lighting.

The BP2618 utilizes advanced 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 BP2618 offers rich protection functions to improve the system reliability, including LED open circuit protection, LED short circuit protection, and thermal regulation function.

#### Features

- Internal compensation for close loop control
- Critical Conduction Mode Operation
- Internal JFET Power Supply, No VCC capacitor
- ±5% LED Output Current Accuracy
- LED Open Protection
- RTH for Adjustable Thermal Regulation
- Available in SOP-8 Package

### Applications

- LED Candle Light
- LED Bulb
- Other LED Lighting



The BP2618 is available in a SOP-8 Package.

SOP-8 Package

# Typical Application

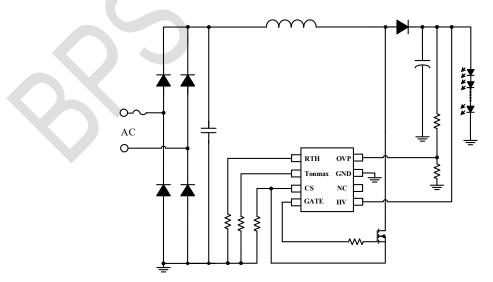


Figure 1 Typical application circuit for BP2618

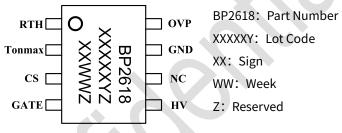


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### **Ordering Information**

| Part Number | Package | Package Method         | Marking                    |
|-------------|---------|------------------------|----------------------------|
| BP2618      | SOP-8   | Tape<br>4,000 pcs/Reel | BP2618<br>XXXXXYZ<br>XXWWZ |

### Pin Configuration and Marking Information



#### Figure 2 Pin Configuration

#### **Pin Definition**

| Pin No. | Name   | Description   |
|---------|--------|---|
| 1       | RTH    | Initial temperature setting and NTC function of over temperature regulation       |
| 2       | Tonmax | Maximum MOSFET on time setting pin, Connect a resistor between Tonmax and GND pin |
| 3       | CS     | Current Sense Pin. Connect a sensing resistor between CS and GND pin              |
| 4       | GATE   | Gate Driver Output. Connect to the gate of MOSFET.                                |
| 5       | HV     | High Voltage Power Supply pin   |
| 6       | NC     | Not connected. Do not connect to other nodes including HV and DRAIN.              |
| 7       | GND    | Ground  |
| 8       | OVP    | Output voltage sensing for Over Voltage Protection                                |



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