

### Description

BP2867XJ is a high precision Buck constant current LED driver. The device operates in critical conduction mode and is suitable for 85Vac~265Vac universal input offline LED lighting.

The BP2867XJ integrates a 500V power MOSFET, with proprietary MOSFET driving technique. It doesn't need VCC capacitor and startup resistor. It can achieve excellent constant current performance with very few external components, so the system cost and size are minimized.

BP2867XJ operates in critical conduction mode, it can achieve precise output current and excellent line regulation. The driver output current does not change with the inductance and output voltage.

The BP2867XJ offers protections to improve the system reliability, including LED short circuit protection, and thermal regulation function.

### Typical Application

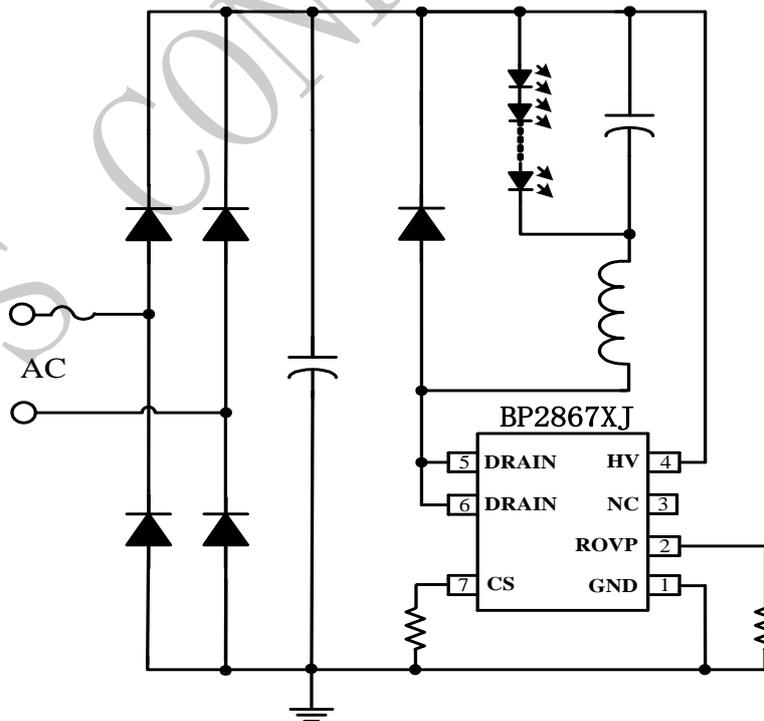


Figure 1. Typical application circuit for BP2867XJ

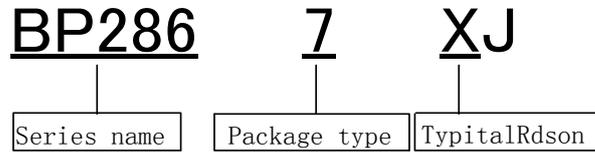
### Features

- No VCC Capacitor and Startup Resistor
- Integrated HV JFET for IC Power Supply
- Internal 500V Power MOSFET
- Critical Conduction Mode Operation
- $\pm 5\%$  LED Output Current Accuracy
- Configurable OVP by Rovp resistor
- LED Short Protection
- Thermal Regulation Function
- Available in DIP7 Package

### Applications

- LED Bulb
- LED Tube
- Other LED Lighting

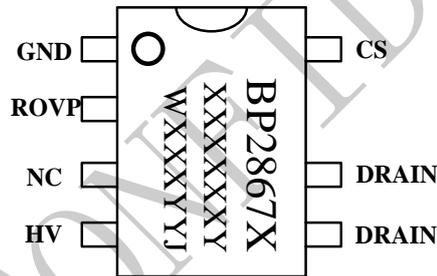
### Naming rules



### Ordering Information

| Part Number | Package | Operating Temperature | Packing Method      | Marking                       |
|-------------|---------|-----------------------|---------------------|-------------------------------|
| BP2867XJ    | DIP7    | -40 °C to 105 °C      | Tube<br>50 Pcs/Tube | BP2867X<br>XXXXXXY<br>WXXXXYJ |

### Pin Configuration and Marking Information



XXXXXXY: Lot Code  
WXXX: Sign  
YY: Week

Figure 2. Pin configuration

### Pin Definition

| Pin No. | Name  | Description   |
|---------|-------|---|
| 1       | GND   | Ground  |
| 2       | Rovp  | OVP configure by a resistor between this pin and GND Pin                  |
| 3       | NC    | Not connect   |
| 4       | HV    | High voltage power supply Pin   |
| 5,6     | DRAIN | Internal HV Power MOSFET Drain.   |
| 7       | CS    | Current Sense Pin. Connect a sense resistor between this pin and GND pin. |