#### Non-isolated Buck Offline LED Driver

#### **Description**

BP2866XJ 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 BP2866XJ 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.

BP2866XJ 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 BP2866XJ offers protections to improve the system reliability, including LED short circuit protection, and thermal regulation function.

#### **Features**

- No VCC Capacitor and Startup Resistor
- Integrated HV JFET for IC Power Supply
- Internal 500V Power MOSFET
- Critical Conduction Mode Operation
- ±5% LED Output Current Accuracy
- Configurable OVP by Rovp resistor
- LED Short Protection
- Thermal Regulation Function
- Available in SOP7 Package

### **Applications**

- LED Bulb
- LED Tube
- Other LED Lighting

## **Typical Application**

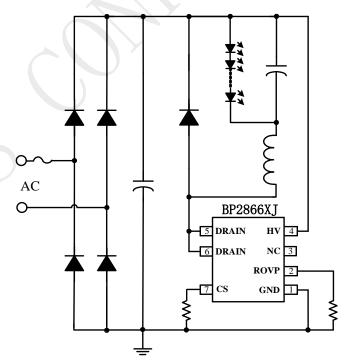
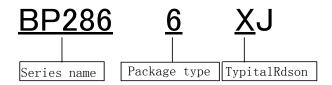


Figure 1. Typical application circuit for BP2866XJ

### Non-isolated Buck Offline LED Driver

### Naming rules



## **Ordering Information**

Part Number	Package	Operating Temperature	Packing Method	Marking
BP2866XJ	SOP7	-40 ℃ to 105 ℃	Tape 4000Pcs/Ree1	BP2866X XXXXXXY WXXXYYJ

# Pin Configuration and Marking Information

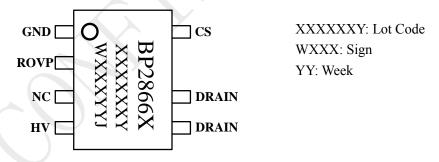


Figure 2. Pin configuration

#### **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.