

### Bright Power Semiconductor Non-isolated Buck Offline LED Driver

#### **Description**

BP2861XJ 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 BP2861XJ integrates a 500V power MOSFET, with gate 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 greatly reduced.

BP2861XJ 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 BP2861XJ offers protections to improve the system reliability, including LED short circuit protection, and thermal regulation function.

#### **Features**

- The same pinning as BP2866XJ
- Integrated 600V Superfast Recovery Diode
- No VCC Capacitor and Startup Resistor
- Integrated HV JFET for IC Power Supply
- Configurable OVP by Rovp resistor
- No flicker in parallel with several lamps
- Enable function is compatible with switch color and sensor light
- ±5% LED Output Current Accuracy
- **LED Short Protection**
- Thermal Regulation Function
- Available in SOP7 Package



### **Applications**

- LED Bulb
- LED Tube
- Other LED Lighting

### **Typical Application**

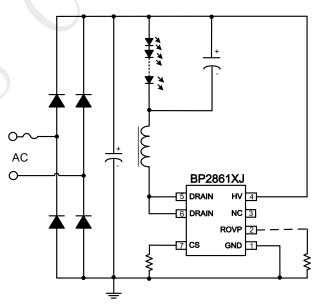
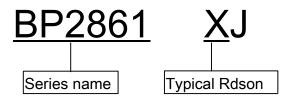


Figure 1. Typical application circuit for BP2861XJ

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### **Naming rules**



# **Ordering Information**

Part Number	Package	Packing Method	Marking
BP2861XJ	SOP7	Tape 4000Pcs/Reel	BP2861 XXXXXYX WXXXYYJ

# **Pin Configuration and Marking Information**

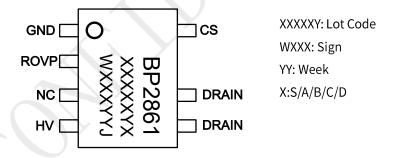


Figure 2. Pin configuration

#### **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



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#### Disclaimer

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