



# BP2861XJ

## Non-isolated Buck Offline LED Driver

### Description

BP2861XJ is a high precision Buck converter with critical conduction driver. The device operates in critical conduction mode and is suitable for 85Vac~265Vac universal input offline LED lighting.

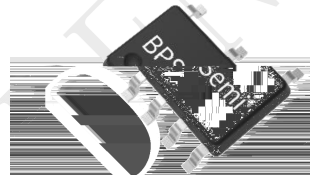
The BP2861XJ integrates a 500V power MOSFET, with gate driving technique. It doesn't need VCC capacitor and startup resistor. It can achieve excellent constant current performance with very few external components, so the system cost and size are greatly reduced.

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 UV-DET for IC Power Supply
- Configurable OVP and Brown-out Resistor
- Low ripple current with several LEDs in parallel
- Enable function is compatible with switch color and sensor light
- $\pm 5\%$  LED Output Current Accuracy
- LED Short Protection
- Thermal Regulation Function
- Available in SOP7 package



### Applications

- LED Bulb
- LED Tube
- Other LED Lighting

### Typical Application

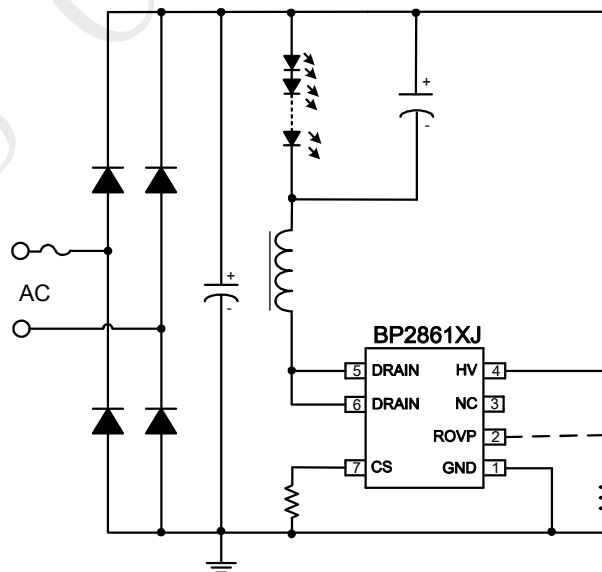


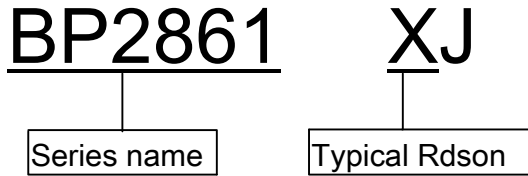
Figure 1. Typical application circuit for BP2861XJ



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### Naming rules



### Marking Information

Part Number	Package	Packing Method	Marking
BP2861XJ	SOP7	Tape 4000Pcs/Reel	BP2861 XXXXXX WXXXX YY

### Pin Configuration and Marking Information

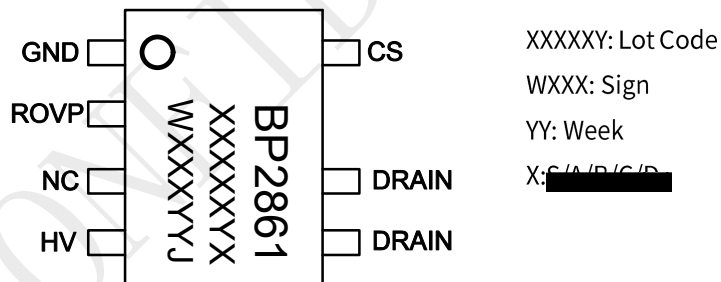


Figure 2. Pin configuration

### 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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