

BP2861XJ

Non-isolated Buck Offline LED Driver

Description

BP2861XJ is a high precision Buck converter circuit. 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 HV MOSFET for IC Power Supply
- Configurable OVP by Resistor
- No flicker in parallel with clamps
- 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

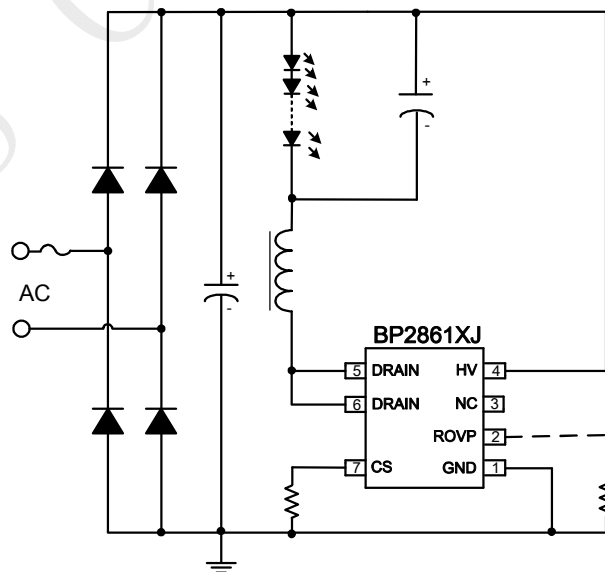
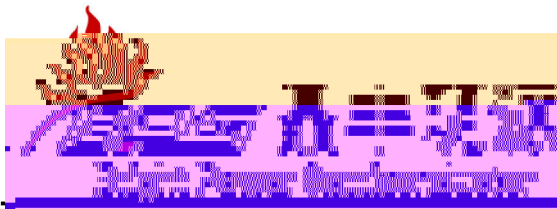


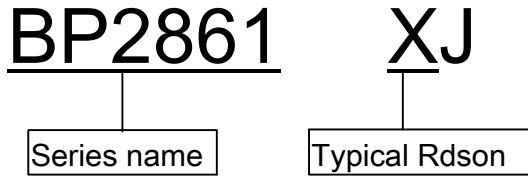
Figure 1. Typical application circuit for BP2861XJ



BP2861XJ

Non-isolated Buck Offline LED Driver

Naming rules



Marking Information

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

Pin Configuration and Marking Information

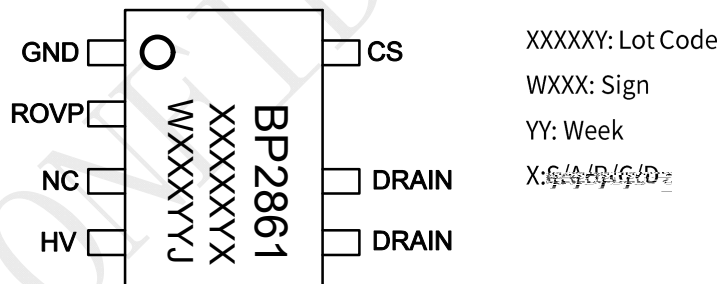
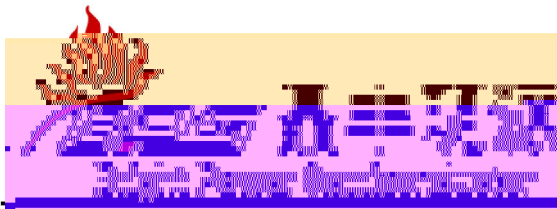


Figure 2. Pin configuration

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.



Disclaimer

Power Semiconductor (BPS) reserves the right to make changes at any time without prior notice.

No license to any intellectual property right owned by BPS or any other third party is granted under this document. BPS provides information in this datasheet "AS IS" and with a caveat makes no warranty, express or implied, including but not limited to, the accuracy of the information provided in this datasheet, merchantability, fitness of a specific purpose, or non-infringement of intellectual property rights of BPS or any other third party. BPS disclaims any and all liabilities arising out of this datasheet or use of this datasheet, including without limitation consequential or incidental damages.