晶丰明源半导体

BP3236B

High Efficiency TRIAC dimmable LED Driver

Description

The BP3236B is a high efficiency TRIAC dimmable LED driver. The device operates in critical conduction mode and is suitable for buck, buck-boost or fly-back LED lighting.

The BP3236B integrates a 500V power MOSFET. It utilizes patent pending MOSFET driving technique and current sensing method. The operating current of the IC is very low. With very few external components count, it can achieve excellent constant current performance, so the system cost and size are greatly reduced.

The BP3236B offers rich protection functions to improve the system reliability, including LED open circuit protection, LED short circuit protection, VCC under voltage protection and thermal regulation function.

The BP3236B is available in a SOP-8 Package.

Features

- TRIAC dimmable
- Integrated 500V Power MOSFET
- Critical Conduction Mode Operation
- Internal JFET Power Supply
- Ultra Low Operating Current
- ±5% LED Output Current Accuracy
- Line Voltage Compensation
- LED Open Protection
- LED Short Protection
- VCC Under Voltage Protection
- External NTC Resistor Setting Thermal Regulation
- Thermal Regulation Function
- Available in SOP-8 Package

Applications

- LED Candle Light
- LED Bulb
- Other LED Lighting

Typical Application

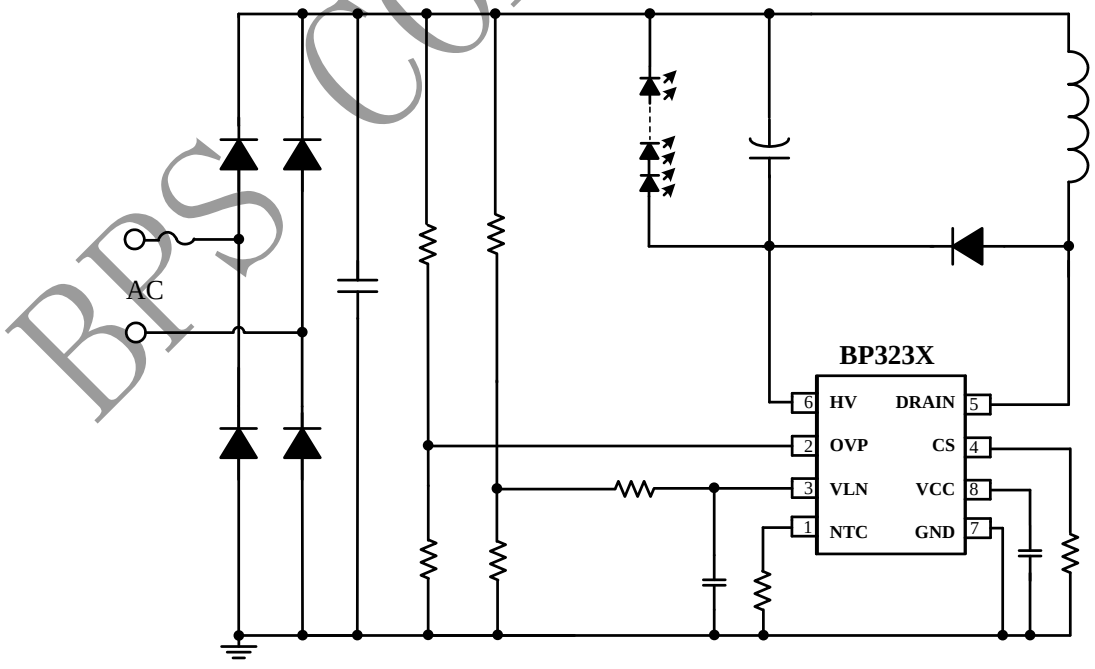
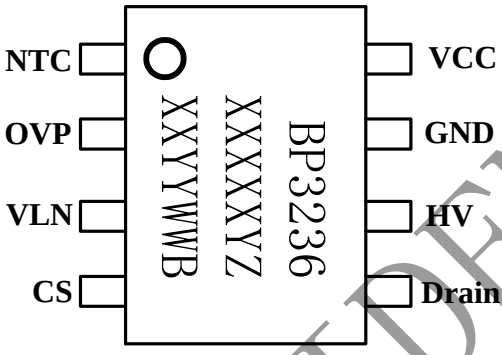


Figure 1. Typical application circuit for BP3236B（Buck-Boost）

Ordering Information

Part Number	Package	Operating Temperature	Packing Method	Marking
BP3236B	SOP8	-40 ℃ to 105 ℃	Tape 4,000 Piece/Reel	BP3236 XXXXXYZ XXYYWWB

Pin Configuration and Marking Information



XXXXXY: lot code
XXYY: Sign
Z: Reserved
WW: Week
B: Internal Power MOSFET

Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1	NTC	External Thermal Regulation Pin, Connect NTC resistor between NTC Pin and GND. NTC Pin can be Floating If Not Use.
2	OVP	Over Voltage Protection Detecting Pin.
3	VLN	Line Voltage Detecting Pin. Connect to 2V voltage reference If Not Use.
4	CS	Current Sense Pin. Connect a sensing resistor between CS and GND pin.
5	DRAIN	Internal HV Power MOSFET Drain.
6	HV	High Voltage Power Supply Pin,
7	GND	IC Ground.
8	VCC	IC Power supply.