

## Description

The BP2535C is a switcher integrated circuits with ultra-low standby power consumption for no neutral wire required applications. The BP2535C is suitable for 85Vac-265Vac universal line voltages. The standby power loss is as low as 1mW to avoid the issue of slightly bright or flashing during the lights turn-off, especially for no neutral wire required smart switch.

The BP2535C integrates a 700V power MOSFET. The voltage and current control technique makes excellent constant voltage regulation. Thus, external compensation circuit is not needed, which reduces solution size and system cost.

The BP2535C utilizes PWM and PFM multiple control modes, contribute to ultra-low standby power, high efficiency, excellent dynamic response and minimized audible noise.

The BP2535C is available in SOT33-5A package.

## Features

- Ultra-low standby power, 1mW@230Vac
- 85Vac-265Vac universal line voltages
- Integrated 700V power MOSFET
- Integrated high voltage startup circuit
- Excellent dynamic response
- Minimized audible noise
- Frequency jitter to improve EMI
- $\pm 3\%$  accuracy of output voltage
- Protection functions
  - Over load protection (OLP)
  - Over voltage protection (OVP)
  - Over temperature protection (OTP)
  - Cycle-by-cycle current limit

## Applications

- No neutral wire required smart switch
- Other no neutral wire required applications

## Typical Application

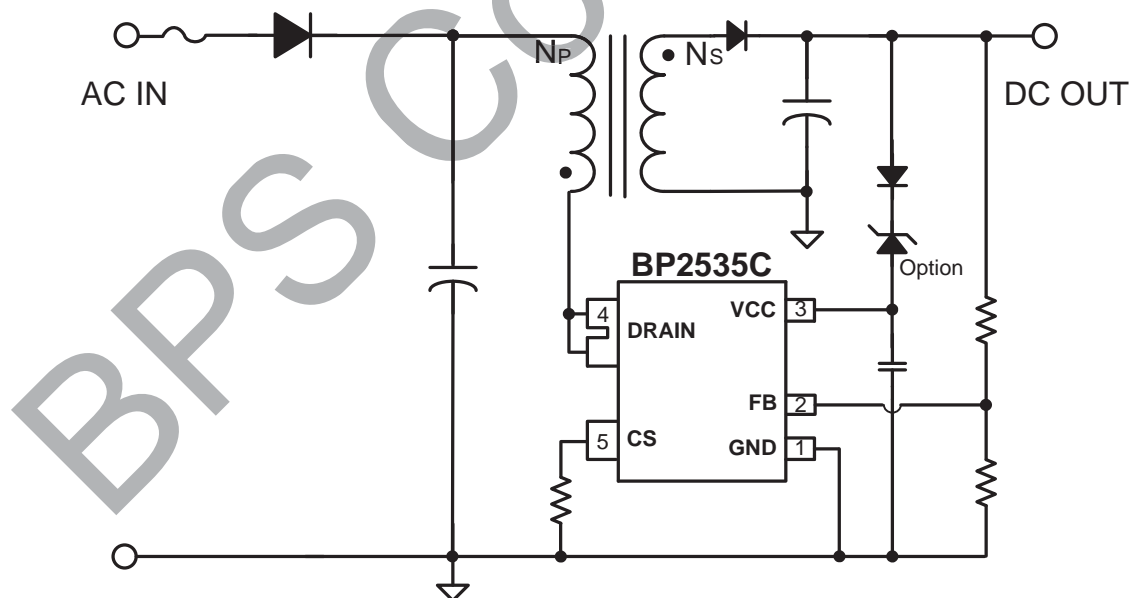
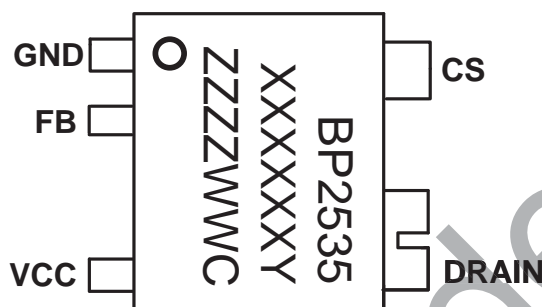


Figure1. Typical application with BP2535C

### Ordering Information

Part Number	Package	Operating Temperature	Packing	Marking
BP2535C	SOT33-5A	-40°C to 105°C	Tape 7,500pcs/Reel	BP2535 XXXXXXY ZZZZWWC

### Pin Configuration and Marking Information



BP2535: Part number  
XXXXXXY: Lot number  
ZZZZ: Internal code  
WW: Week code

Figure 2. SOT33-5A pin configuration

### Pin Functions

Pin NO.	Pin Name	Descriptions
1	GND	Ground
2	FB	Output voltage feedback pin
3	VCC	Power supply
4	DRAIN	Drain connection of the internal power MOSFET.
5	CS	Source of the internal power MOSFET. Current sense. Connect a sense resistor between CS and GND.

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### Disclaimer

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