

### Description

BP2863MC 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 BP2863MC integrates a 500V power MOSFET. With Gate MOSFET driving technique. It does not 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.

BP2863MC utilizes high precision current control method. It can achieve precise output current and excellent line regulation. The driver operates in critical conduction mode, the output current does not change with the inductance and output voltage.

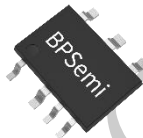
The BP2863MC offers LED short circuit protection and thermal regulation function to improve the system reliability.

### Features

- Integrated 800V Bridge rectifier
- Integrated 600V Superfast Recovery Diode
- The same Pin as BP2863
- No VCC Capacitor and Startup Resistor
- Internal 500V Power MOSFET
- Integrated HV JFET for IC Power Supply
- inductor current critical conduction mode
- No Auxiliary Winding
- Critical Conduction Mode Operation
- ±5% LED Output Current Accuracy
- LED Short Protection
- VCC Under Voltage Protection
- Thermal Regulation Function
- Available in ASOP7 Package

### Applications

- LED Candle Light
- LED Bulb
- Other LED Lighting



### Typical Application

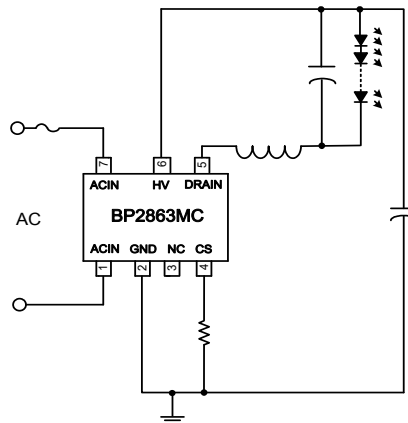
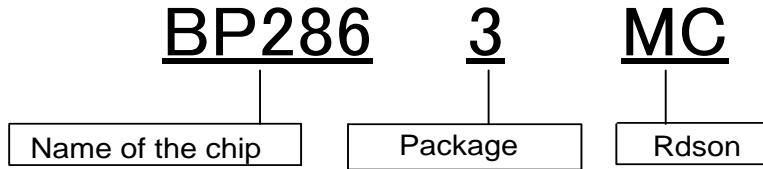


Figure 1. Typical application circuit for BP2863MC

**Name of the chip**

**Ordering Information**

Part Number	Package	Packing Method	Marking
BP2863MC	ASOP7	Tape 5,000 Pcs/Reel	BP2863 XXXXXYM WXXXYYC

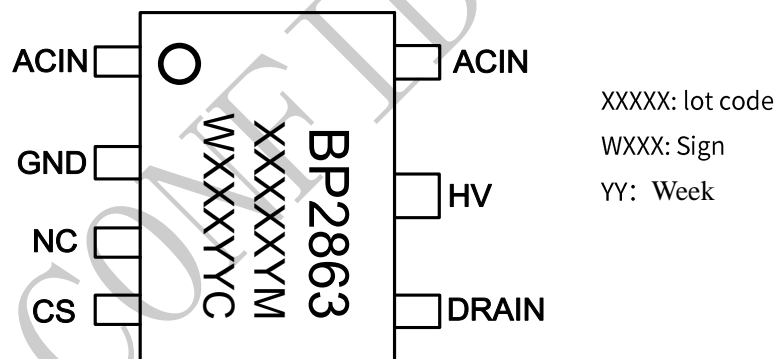
**Pin Configuration and Marking Information**


Figure 2. Pin configuration

**Pin Definition**

Pin No.	Name	Description
1,7	ACIN	AC source input
2	GND	Chip GND Pin
3	NC	No Connection
4	CS	Current Sense. Connect a sense resistor between this pin and power GND
5	DRAIN	Internal HV Power MOSFET Drain
6	HV	High voltage power supply Pin

## Disclaimer

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