

Description

The BP3212 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 BP3212 integrates a 300V 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 BP3212 offers rich protection functions to improve the system reliability, including LED open circuit protection, LED short circuit protection, VCC under voltage protection, CS resistor short circuit protection and thermal regulation function.

The BP3212 is available in a SOP8 Package.

Features

- TRIAC dimmable
- Internal 300V Power MOSFET
- Critical Conduction Mode Operation
- Ultra Low Operating Current
- $\pm 5\%$ LED Output Current Accuracy
- LED Open Protection
- LED Short Protection
- Current Sensing Resistor Short Protection
- VCC Under Voltage Protection
- Thermal Regulation Function
- Available in SOP8 Package

Applications

- LED Candle Light
- LED Bulb
- Other LED Lighting

Typical Application

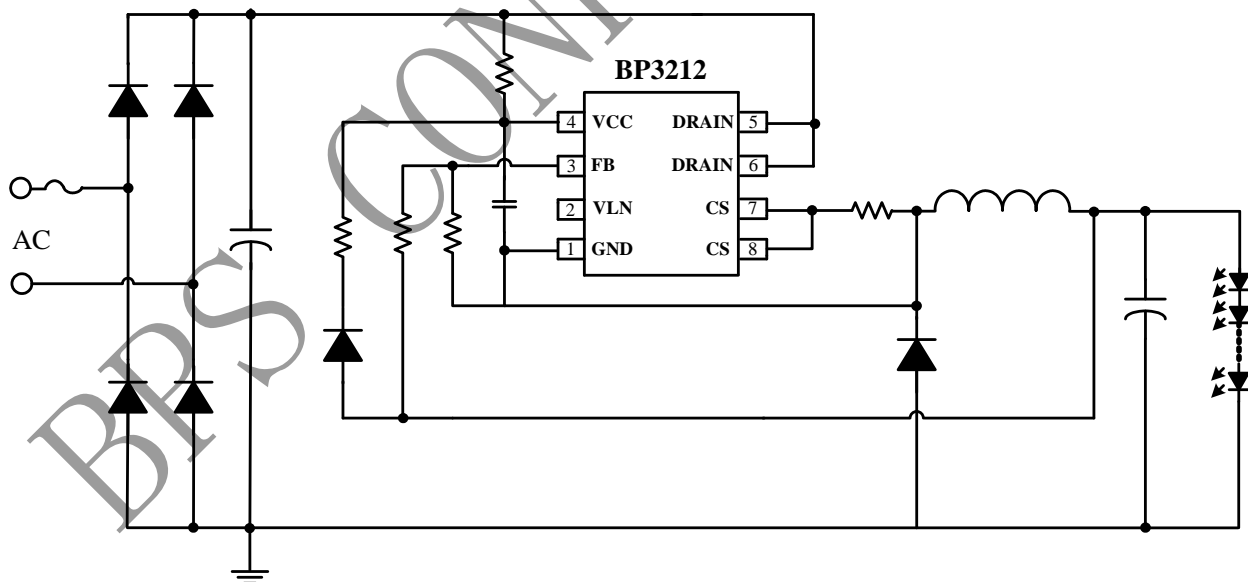


Figure 1. Typical application circuit for BP3212 (Buck)



晶丰明源半导体

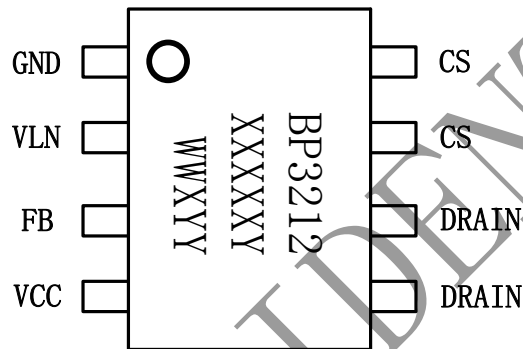
BP3212

High Efficiency TRIAC dimmable LED Driver

Ordering Information

Part Number	Package	Operating Temperature	Packing Method	Marking
BP3212	SOP8	-40 °C to 105 °C	Tape 4, 000 pcs/Reel	BP3212 XXXXXY WWXY

Pin Configuration and Marking Information



XXXXXY: lot code

WW: Sign

X: Year

YY: Week

Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1	GND	Ground
2	VLN	Line Voltage Detecting Pin
3	FB	Over Voltage Protection Detecting Pin.
4	VCC	Power Supply Pin
5, 6	DRAIN	Internal HV Power MOSFET Drain.
7, 8	CS	Current Sense Pin. Connect a sensing resistor between this pin and GND pin.