

Description

The BP3169AJ is a high precision primary-side feedback and regulation controller for LED lighting, it operates in constant current control mode and is designed to work in inductor current discontinuous conduction mode and especially suitable for flyback convertor under universal input.

The BP3169AJ uses specific demagnetization detection technology and high voltage JFET power supply technology. It doesn't need the auxiliary winding for VCC supply. It can achieve excellent constant current performance with very few external components, so the system cost and size are minimized.

The BP3169AJ offers rich protections to improve the system reliability, including LED short circuit protection, over voltage protection and thermal regulation function.

BP3169AJ is available in SOP7 package

Features

- No VCC capacitor and no starting resistance
- Integrated HV JFET for power supply
- No auxiliary winding for sensing and supplying
- Universal input voltage
- $\pm 5\%$ LED output current accuracy
- LED short protection
- LED open protection
- EN function
- Chip power supply under-voltage protection
- Thermal regulation function

Applications

- LED Bulb
- LED Downlight
- Other LED Lighting

Typical Application

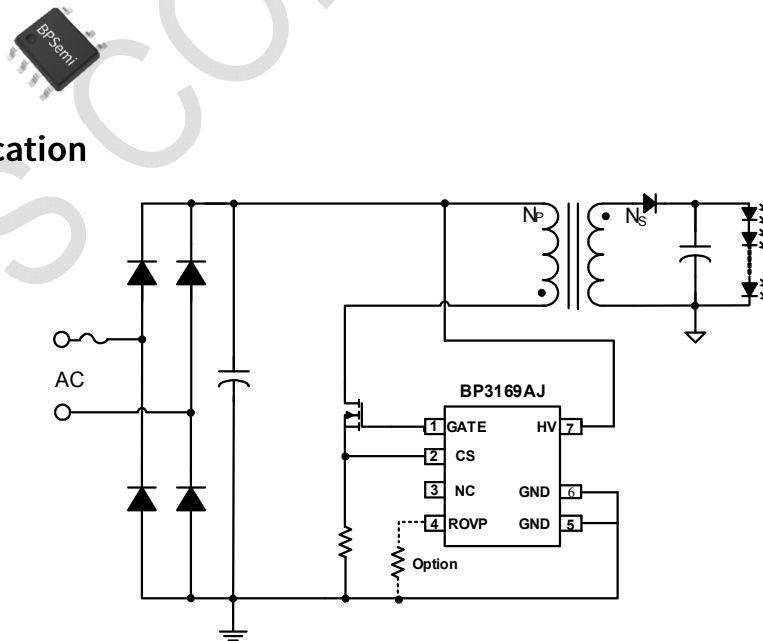


Figure 1. Typical application circuit for BP3169AJ

Ordering Information

Part Number	Package	Packing Method	Marking
BP3169AJ	SOP7	Tape 4,000 Pieces/Reel	BP3169A XXXXXXY FGWWJ

Pin Configuration and Marking Information

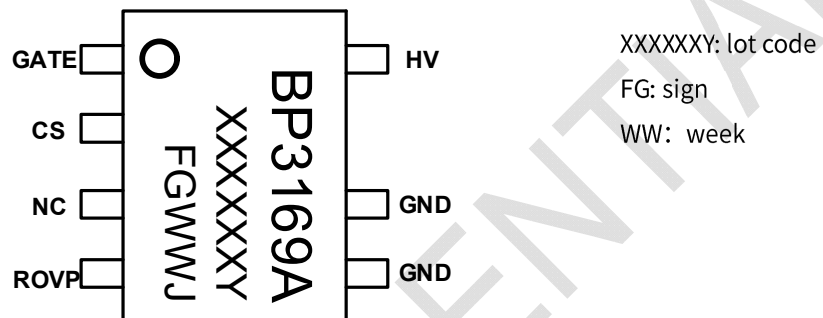


Figure 2. Pin configuration

Pin Definition

Pin Number	Name	Description
1	GATE	External MOS gate drive pin
2	CS	Current sense pin
3	NC	Not connect
4	ROVP	OVP pin
5,6	GND	Ground
7	HV	Internal high voltage JEFT

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