

Description

BP5116DJ is a high current precision Linear LED Driver, integrated with High Voltage regulation switchers and JFET supply, specially designed for AC line LED strings forwarded with high voltage and low current.

In application, it supports a quite small BOM benefit from no ECAP and no Magnetics, compile with EMI and safety standard.

BP5116DJ can drive precision constant current by option of an external resistor, and set up the LED strings in group linear compile with THD performance. Typical 40mA LED current is optimized for 220V line voltage.

Features

- ◆ High integration, all SMTs in small size.
- ◆ No ECAPs and magnetics
- ◆ Integrated with 500V HV MOS, saved on safety components.
- ◆ Fast startup
- ◆ LED current set by external resistors with $\pm 5\%$ accuracy.
- ◆ On chip thermal regulation.
- ◆ Compensation for line regulation
- ◆ In ESOP8 package.

Application

- ◆ GU10/E27 LED retrofit lamps
- ◆ LED candle
- ◆ Other LED lighting

Typical Application

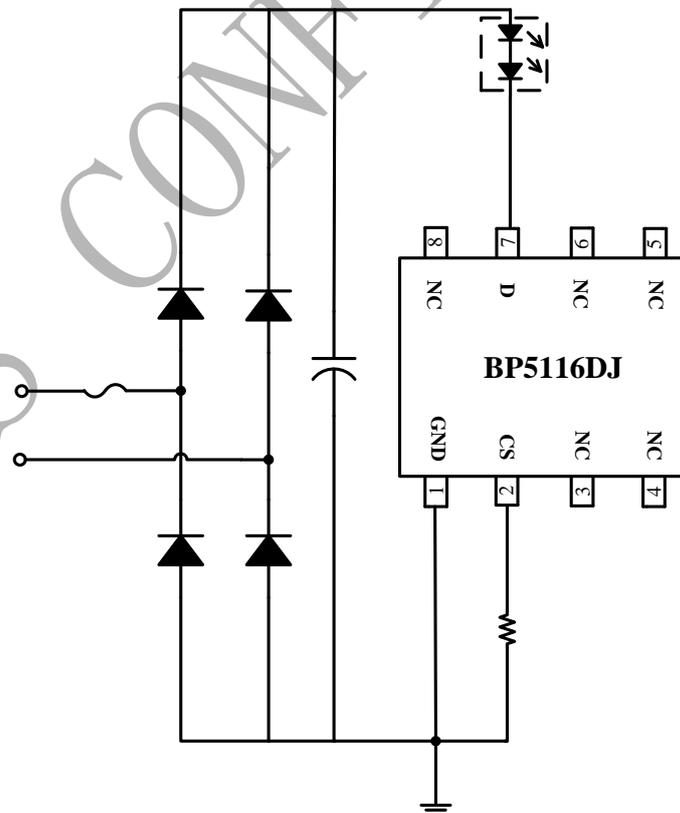


Fig.1 BP5116DJ Typical Application

Order Information

Part Number	Package	Temperature	Packing Method	Mark
BP5116DJ	ESOP8	-40 °C to 105 °C	Tape 4,000 pcs/reel	BP5116 XXXXXYJ WXYD

Pin mapping

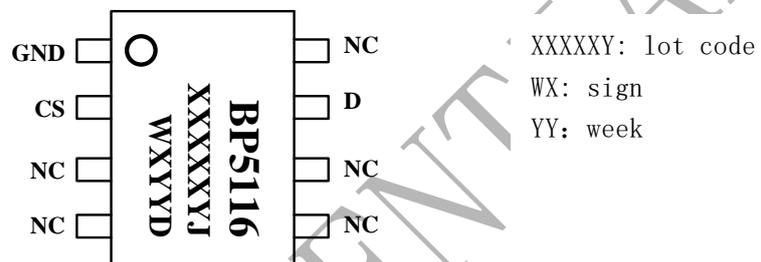


Fig 2 BP5116DJ Pin Mapping

Pin Descriptions

Pin No.	Pin Name	Descriptions
1	GND	IC ground
2	CS	Current sense, connect the current sense resistor to GND
3, 4, 5, 6, 8	NC	Not connect
7	D	Drain for LED string

Disclaimer

The information provided in this datasheet is believed to be accurate and reliable. However, Bright Power Semiconductor (BPS) reserves the right to make changes at any time without prior notice.

No license, to any intellectual property right owned by BPS or any other third party, is granted under this document. BPS provides information in this datasheet “AS IS” and with all faults, and makes no warranty, express or implied, including but not limited to, the accuracy of the information provided in this datasheet, merchantability, fitness of a specific purpose, or non-infringement of intellectual property rights of BPS or any other third party. BPS disclaims any and all liabilities arising out of this datasheet or use of this datasheet, including without limitation consequential or incidental damages.

BPS Confidential