

Description

BP5131DC 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.

BP5131DC 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 TO252-3 package.

Application

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

Typical Application

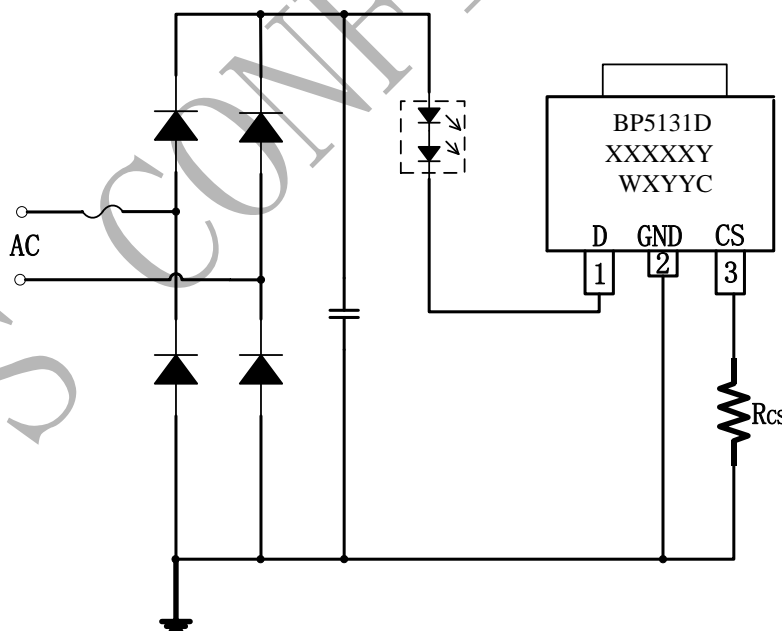
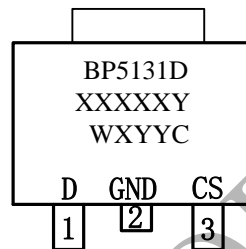


Fig.1 BP5131DC Typical Application

Order Information

Part Number	Package	Temperature	Packing Method	Mark
BP5131DC	TO252-3	-40 °C to 105 °C	Tape 2,500 pcs/reel	BP5131D XXXXXY WXYC

Pin mapping



XXXXXY: lot code

WX: sign

YY: week

Fig 2 BP5131DC Pin Mapping

Pin Descriptions

Pin No.	Pin Name	Descriptions
1	D	Drain for LED string
2	GND	IC ground
3	CS	Current sense, connect the current sense resistor to GND