

Description

BP5136H 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.

BP5136H 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. BP5136H support thermal regulation by an external resistor to prevent over driving in high input voltage.

BP5136H invite an external resistor to fulfill the line regulation and adjust the output current following input voltage.

Features

- ◆ High integration, all SMTs in small size.
- ◆ No ECAPs and magnetics
- ◆ Integrated with 700V/500V HV MOS, saved on safety components.
- ◆ Align working with $\pm 20\%$ tolerance on line voltage;
- ◆ Fast startup
- ◆ LED current set by external resistors with $\pm 5\%$ accuracy.
- ◆ Programmable thermal regulation.
- ◆ Compensation for line regulation
- ◆ In SOP8-EP package.

Application

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

Typical Application

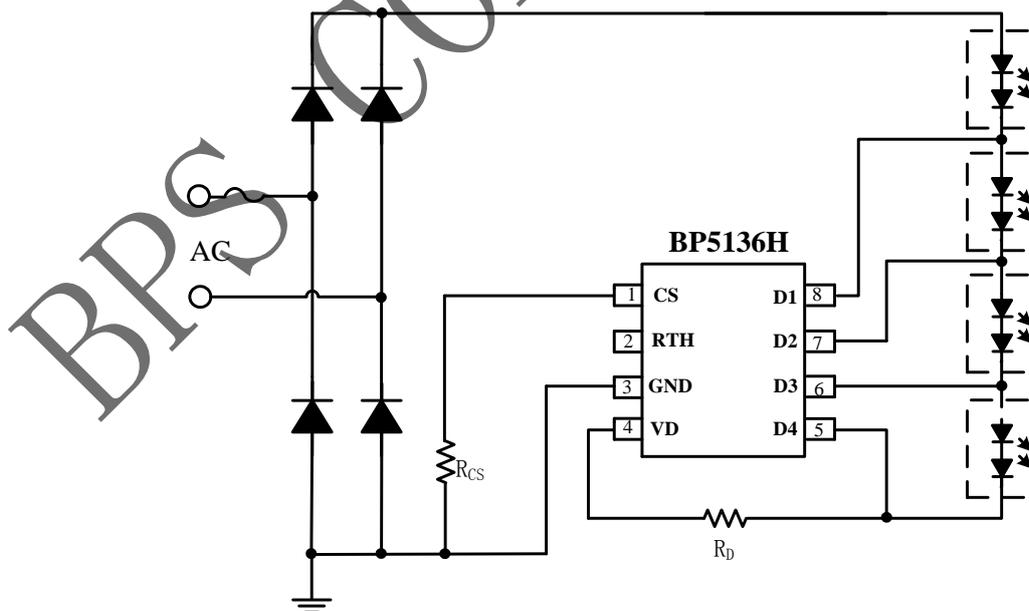


Fig.1 BP5136H Typical Application

Order Information

Part Number	Package	Temperature	Packing Method	Mark
BP5136H	SOP8-EP	-40 °C to 105 °C	Tape 4,000 pcs/reel	BP5136H XXXXXY XYY

Pin mapping

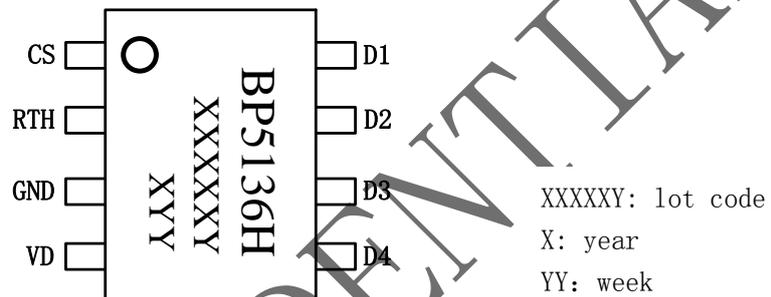


Fig 2 Pin Mapping

Pin Descriptions

Pin No.	Pin Name	Descriptions
1	CS	Current sense, connect the current sense resistor to GND
2	RTH	Thermal regulation, need connect resistor to GND
3	GND	IC ground
4	VD	Drain Voltage, need connect resistor to Drain Pin
5	D4	Drain for LED string4
6	D3	Drain for LED string3
7	D2	Drain for LED string2
8	D1	Drain for LED string1