

Description

BP5356H is a high precision multiple segments linear constant current LED driver, which integrates 700V MOSFET and HV power supply circuit. It is mainly used to drive high voltage LED chips supplied by mains. Without electrolytic capacitors and magnetic components, the LED driver can achieve small size, long life and meet EMI requirements.

BP5356H can precisely set the current of LED through external resistor, and THD<20% can be easily achieved by optimizing the CS reference.

BP5356H has thermal fold back function. When the IC's temperature is too high, the LED current will be reduced.

BP5356H integrates input voltage compensation function. When the input voltage is too high, BP5356H will reduce the output current according to the external compensation resistance to ensure that the input power does not change a lot.

BP5356H optimizes pin definition, facilitates layout and saves jumper resistor in multi-chip parallel connection.

Typical Application

Features

- ◆ THD<20%
- ◆ Simple BOM and compact size
- ◆ No E-cap and magnetic components
- ◆ Integrate 700V MOSFET for each segment
- ◆ Save jumper resistor in multi-chip parallel connection
- ◆ Can work under $\pm 20\%$ line voltage variation
- ◆ Fast start up
- ◆ $\pm 5\%$ output current accuracy
- ◆ LED current set by external resistor
- ◆ Input voltage compensation
- ◆ Integrate adjustable thermal fold back
- ◆ SOP8-EP package

Application

- ◆ LED retrofit
- ◆ LED downlight
- ◆ Others

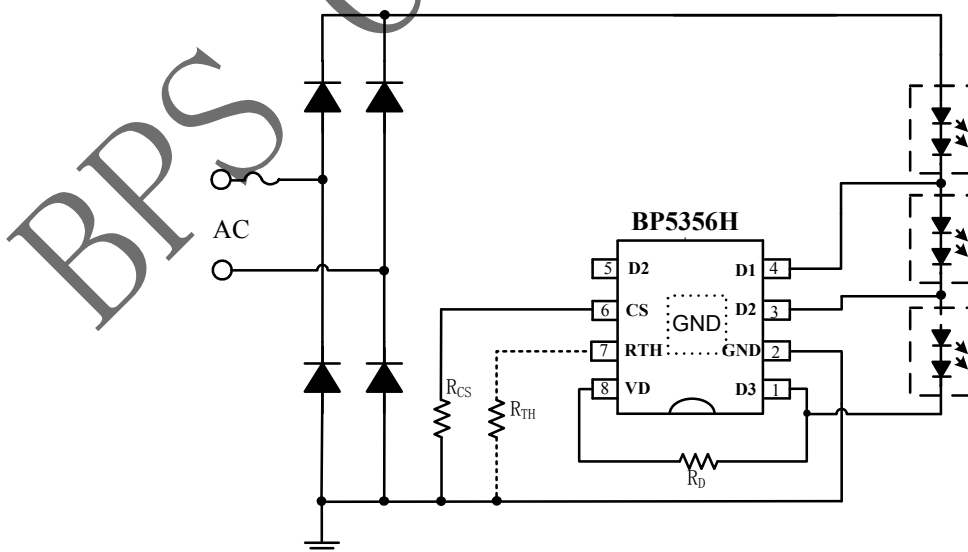
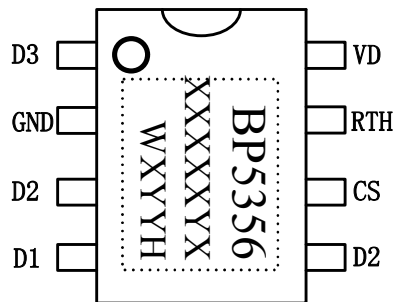


Fig.1 BP5356H Typical Application

Ordering Information

Part Number	Package	Temperature Range	Tape & Reel	Marking
BP5356H	SOP8-EP	-40 °C to 105 °C	Tape 4,000 pcs/reel	BP5356 XXXXXXYX WXYHH

Pin Configuration



XXXXXY: Lot Code
WX: Reserved code
YY: Week

Fig. 2 Pin Configuration

Pin Definition

Pin Number	Pin Name	Description
1	D3	Drain of LED string 3
2	GND	IC ground
3,5	D2	Drain of LED string 2
4	D1	Drain of LED string 1
6	CS	Current sense, need to connect resistor to GND
7	RTH	Thermal regulation setting pin, need to connect resistor to GND
8	VD	Voltage compensation, connect resistor to D3

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