BP2876D

PWM Dimmable Buck LED Driver

Description

BP2876D is a high-precision, buck mode and constant current LED driver IC which supports PWM dimming, it combines analog dimming mode and PWM dimming mode, meanwhile it could optimize linear of dimming and consistency of luminous flux. BP2876D could be used in the non-isolated buck mode constant current LED power which is suitable for 85Vac~265Vac voltage range, it is designed for flicker- free lightning field on purpose.

BP2876D integrates a 500V power MOSFET. It utilizes patent pending MOSFET driving technique and current sensing method. The operating current of the IC is very low. With very few external components count and no auxiliary winding., it can achieve excellent constant current performance, so the system cost and size are greatly reduced.

There is high-precision current sense circuit inside the BP2876D, meanwhile the IC uses the patented constant current control, which achieves high-precision constant current output and great line voltage regulation. The IC works under inductor current critical conduction mode, so the output current is invariant with the inductance and LED voltage and it can achieve excellent load regulation.

BP2876D has various protections, includes LED open circuit protection, LED short circuit protection, CS resistor short circuit protection, input under-voltage protection, over temperature regulation and thermal fold back.

BP2876D uses the SOP7 package.

Features

- Patented digital dimming
- Flicker-free dimming optimization
- Stepless dimming
- 1%-100% PWM dimming
- No audio frequency noise.
- Integrated with 500V MOS
- No auxiliary winding
- ±5% output LED current accuracy
- LED open/short circuit protection
- CS resistor short circuit protection
- IC supply under-voltage protection
- thermal fold back
- SOP7 package

Application

- LED candle light
- Fluorescent lamp
- LED Bulb
- Other LED lights

Typical Application

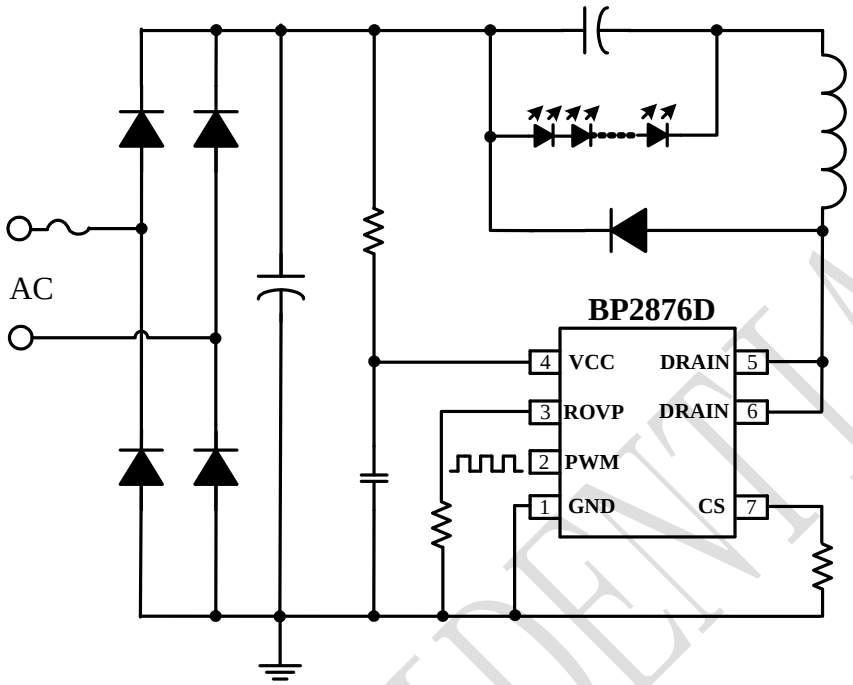

Fig.1 BP2876D Typical Application