

Description

The BP3177DF is an isolated low PF dimmable LED driver controller, compatible with PWM or analog dimming signal for Constant Current Reduction (CCR) dimming, to provide high-precision and flicker-less light output.

The BP317DF works in BCM and QR mode to improve system efficiency and EMI, and to reduce the size of Flyback transformer. The BP3177DF adopts advanced primary-side constant current algorithm to provide with excellent line and load regulation. Primary-side regulation also helps to eliminate second-side components and reduce system cost.

The BP317DF provides with multiple protections to assure reliability of LED driver design.

The BP3177DF is available in DIP-7 package.



DIP-7 package

Features

- Wide dimming range from 5% to 100%, compatible with PWM or analog dimming signal, and support dim-to-off
- Tight LED current reference($\pm 3\%$)
- Good current tolerance in deep dimming
- No output current overshoot
- Built-in line and load regulation
- Multiple protections
 - LED open and short protection
 - CS short protection
 - Over Temperature Protection

Typical Application

- ◆ LED Ceiling Lights
- ◆ LED Street Lamp

Typical Application

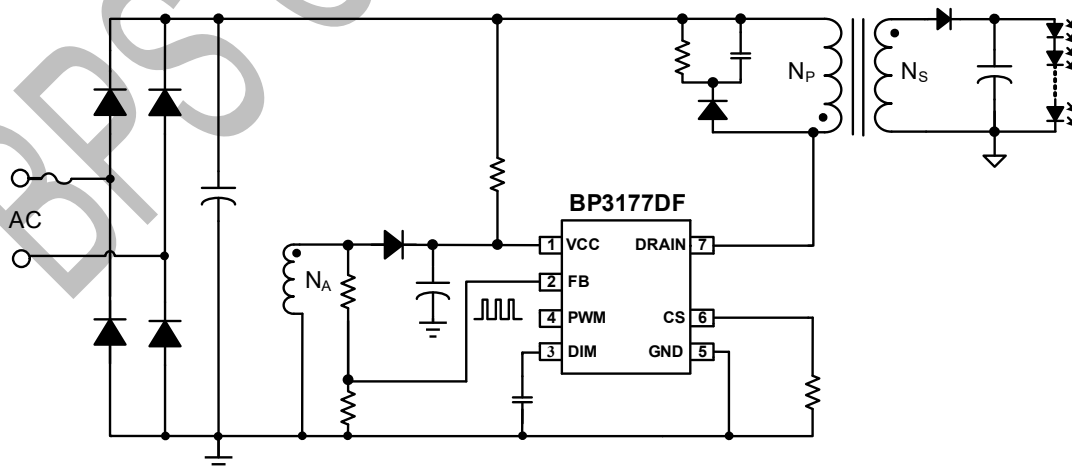


Figure 1 Typical Application of the BP3177DF PWM dimming

Ordering Information

Part Number	Package	Package Method	Marking
BP3177DF	DIP-7	Tube 50 pcs/Tube	BP3177 XXXXXYF XXYYWWD

Pin Configuration and Marking Information

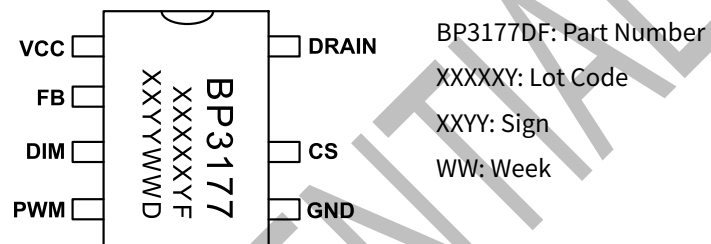


Figure 2 Pin Configuration

Pin Definition

Pin No.	Name	Parameter
1	VCC	IC power supply
2	FB	Zero current detection and output voltage sensing for OVP
3	DIM	Analog dimming signal input pin
4	PWM	PWM dimming signal input pin, internally pulled up to VCC in default
5	GND	IC Ground
6	CS	MOSFET current sensing
7	DRAIN	DRAIN of internal MOSFET

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