BP3179F

Isolated Low PF Dimmable LED Driver

Description

BP3179F is an isolated low PF dimmable LED driver controller, compatible with PWM or analog dimming signal, to provide high-precision and flicker-less light output.

BP3179F works in BCM and QR mode to improve system efficiency and EMI. BP3179F adopts proprietary 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.

BP3179F provides with multiple protections to assure reliability of LED driver design.

BP3179F is packaged in SOP-8.

Features

- Wide dimming range from 5% to 100%, compatible with PWM or analog dimming signal; support dim to off
- Tight LED current (+/-3%)
- Good current consistency in deep dimming
- Built-in line and load regulation
- Multiple protections
  - LED open and short protection
  - CS short protection
  - Over current protection
  - Over temperature protection

Application

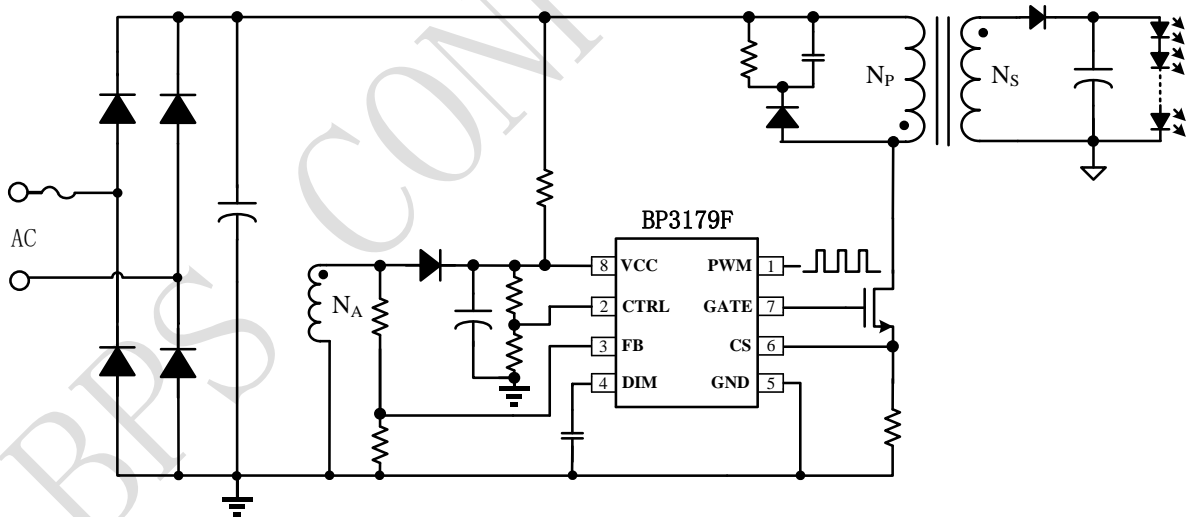- LED Ceiling Lights
- LED Street Lamp

Typical Application

Fig.1 BP3179F PWM Dimming

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Ordering Information

Part Number	Package	Operating Temperature	Packing Method	Marking
BP3179F	SOP-8	-40 ℃ to 105 ℃	Tape&Reel 4,000 pcs/Reel	BP3179 XXXXXYZ XYWWF

Pin Configuration

XXXXXY： Lot Code
XY： Sign
WW： Week
Z： Reserved
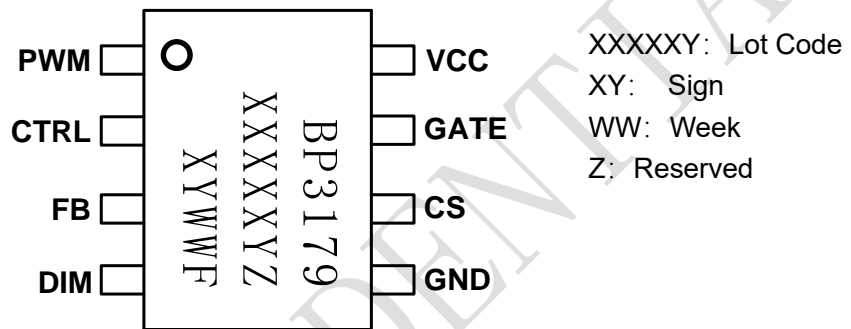
Fig.2 Pin Configuration

Pin Definition

Pin No.	Name	Description
1	PWM	PWM dimming signal input pin
2	CTRL	Control pin to enable or disable the controller, the voltage should be 0.35V for normal operation
3	FB	Zero current detection and output voltage sensing for OVP
4	DIM	Analog dimming signal input pin
5	GND	Signal GND
6	CS	MOSFET current sensing
7	GATE	MOSFET gate driving
8	VCC	Power supply pin

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