

Non-isolated APFC Buck LED Driver

Description

BP2373XG is a high precision non-isolated APFC buck LED driver, specially designed for universal mains with constant current control. BP2373XG operates in Critical Conduction Mode to reduce the switching loss and optimize the EMI.

BP2373XG remove the VCC capacitor, COMP capacitor and R_{CS} resistor to simplify the external BOM. And it utilizes specific current detection, with few external components, it achieves high precision output current, excellent line regulation and load regulation.

BP2373XG offers full of protection functions to improve the system reliability, including LED load short protection. The system reliability is further improved by the thermal and input overvoltage regulation function. The output current is reduced when the driver is in condition of over temperature or input overvoltage.

Features

- Active-PFC for High PF and Low THD
- No VCC and COMP capacitor
- Integrated current sense resister
- Integrated 800V rectifier bridge
- Integrated 650V superfast recovery diode
- Critical Conduction Mode Operation
- LED Short Protection
- Cycle by Cycle Current Limit
- Thermal Regulation Function
- Input Overvoltage Regulation Function
- Available in ASOP7 Package

Applications

- LED Bulb
- LED Tube
- Other LED Lighting



Typical Application

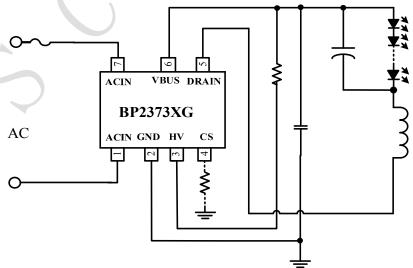
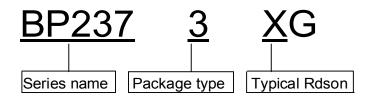


Figure 1 Typical application circuit for BP2373XG



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Naming rules



Ordering Information

Part Number	Package	Package Method	Marking
BP2373XG	ASOP7	Tape 5,000 pcs/Reel	BP2373 XXXXXYX ZZZZWWG

Pin Configuration and Marking Information

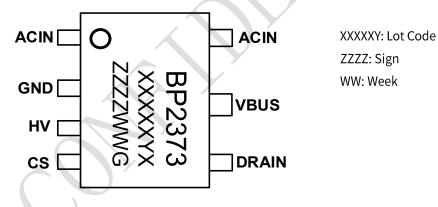


Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1,7	ACIN	Input Voltage.
2	GND	Ground.
3	HV	High Voltage startup and power supply.
4	CS	ILED internal default value 94.5mA when CS floating
5	DRAIN	Internal High Voltage Power MOSFET Drain.
6	VBUS	Built-in diode negative





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