

BP6211B

Fast Turn-Off Synchronous Rectifier for CCM/DCM Flyback Converter

Description

The BP6211B is a high-performance, high-integration, self-biased synchronous rectifier (SR) with a 60 V MOSFET integrated for flyback converters. It can replace the secondary diode rectifier for higher efficiency and power density.

The BP6211B supports discontinuous conduction mode (DCM), quasi-resonant (QR) and continuous conduction mode (CCM) operations. Robust operation in CCM is enabled with adaptive gate drive and faster turn-off speed with 4 A sink current and ultra-short turn-off delay.

The internal ringing detection circuitry prevents the IC from falsely turning on during DCM or QR operations. The internal turn-on blanking function prevents an accidental turn-off due to parasitic ringing. Ultra-short turn-on delay increases SR MOSFET conduction time to improve efficiency.

The BP6211B generates its own supply voltage without requiring auxiliary winding for low-side or high-side rectification. This feature makes it suitable for charger applications with a very low output voltage or wide output voltage range.

The BP6211B is available in an SOP-8 package.

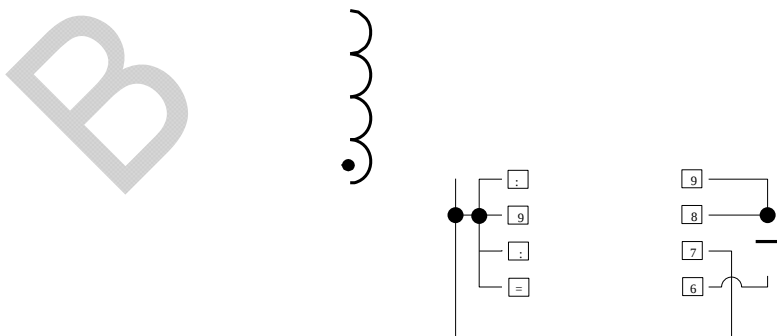
Features

- Integrated 60 V / 14 mΩ MOSFET
- Adaptive gate drive and faster turn-off speed
- Supports DCM, QR and CCM operations
- Ringing detection prevents false turn-on in DCM
- Supports low-side and high-side rectification
- Self-biased and no need for auxiliary winding for high-side rectification
- Supports wide output voltage range down to 0 V

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Ordering Information

Part Number	Package	Packing	Marking
BP6211B	SOP-8	Tape & Reel	

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