

Description

The BP8519C is a high precision Non-isolated buck switch for constant output voltage application. The device is suitable for 85Vac~265Vac universal input Non-isolated buck power supply.

The BP8519C integrates a 700V power MOSFET. With the proprietary loop control technique, it doesn't need external compensation cap, and can get excellent CV regulation. The chip integrates smart high voltage startup and power supply circuit, so auxiliary winding could be eliminated. Thus, the system cost and size are minimized.

The BP8519C utilizes multiple mode control of PWM & PFM, which contribute to very low standby power, high efficiency, excellent dynamic response and minimized audible noise.

The BP8519C is available in SOT23-5 package.

Features

- Programmable output voltage, support 3.3V output without LDO
- Internal 700V Power MOSFET
- Integrated HV startup and power supply circuits
- Excellent dynamic response for smaller output voltage ripple
- Standby power <100mW
- Minimized audible noise
- $\pm 5\%$ output CV accuracy
- Integrated soft startup function
- Tiny SOT23-5 package

Protection Function

- Overload protection
- Over voltage protection
- Over temperature protection
- Cycle by cycle Current limitation

Applications

- Small standby power supply
- Other auxiliary power applications

Typical Application

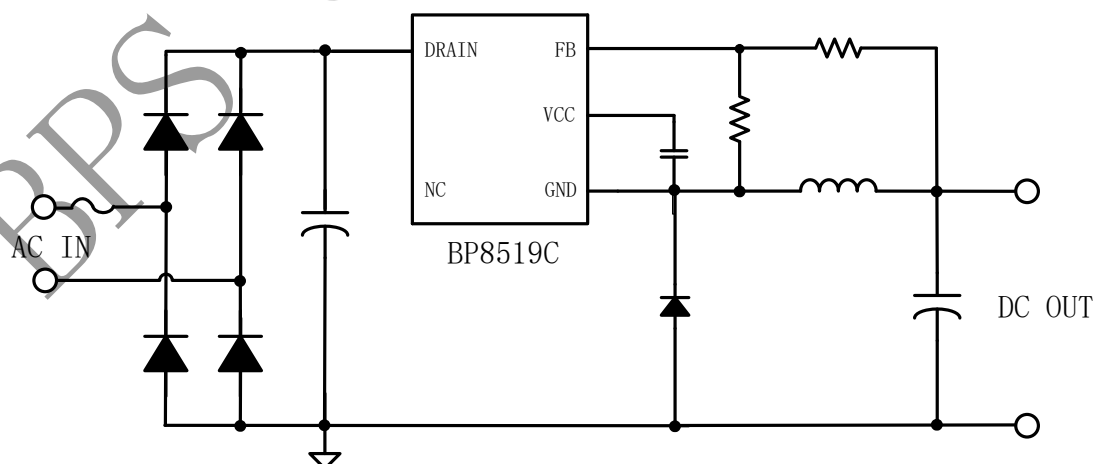


Figure 1. Typical application circuit for BP8519C

Ordering Information

Part Number	Package	Operating Temperature	Package Method	Marking
BP8519C	SOT23-5	-40 °C to 105 °C	Tape 3,000pcs/reel	8519C

Pin Configuration and Marking Information

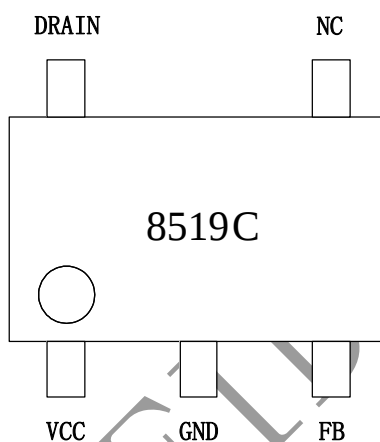


Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1	VCC	Power supply pin
2	GND	Ground
3	FB	Out voltage feedback
4	NC	No connection
5	DRAIN	Drain of the integrated HV MOSFET