BP2522X

Low Standby Power Non-isolated CV Converter

Description

The BP2522X is an ultra-low standby power non-isolated buck converter for constant output voltage application. The device is suitable for 85Vac~265Vac universal input non-isolated auxiliary power supply.

The BP2522X integrates a high voltage power MOSFET. With the proprietary output voltage and current control technique, it can get excellent CV regulation. The chip integrates smart high voltage startup and power supply circuit, so the auxiliary winding can be eliminated.

The BP2522X utilizes PWM & PFM multiple mode control, powering VCC by output voltage, which contribute to very low standby power, high efficiency, excellent dynamic response and minimized audible noise.

The BP2522X is available in SOT33-5A package.

Features

- Standby power <20mW at 120Vac and 230Vac
- Fixed 12V and 24V output voltage
- Minimized audible noise
- Internal High Voltage Power MOSFET
- Integrated HV startup
- Excellent dynamic response for smaller output voltage ripple
- ±5% output CV accuracy
- Integrated soft startup function
- SOT33-5A package

Protection Function

- Over load protection
- Output short protection
- Over temperature protection
- Cycle by cycle Current limitation

Applications

- Standby power supply for smart lighting
- Other auxiliary power applications

Typical Application

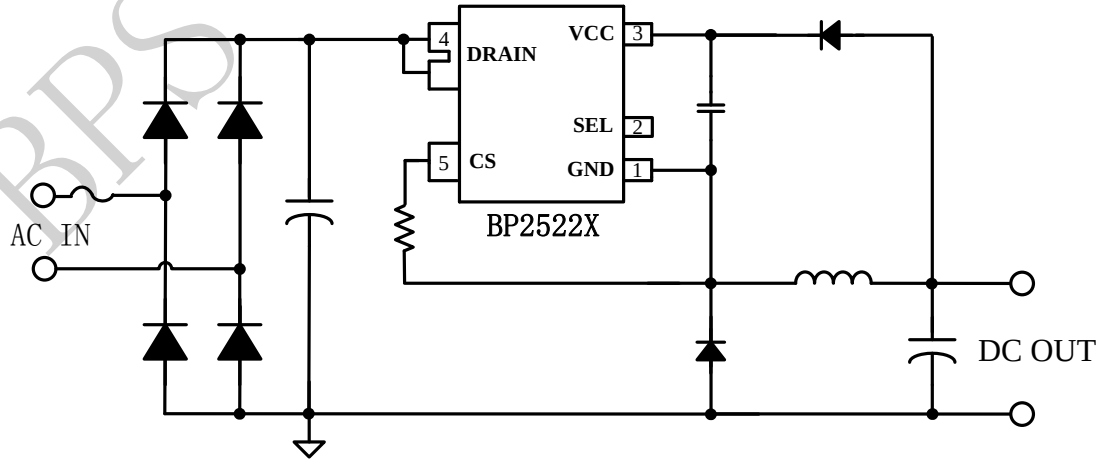
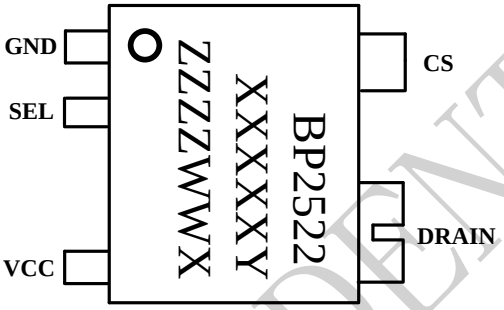


Figure 1. Typical application circuit for BP2522X

Ordering Information

Part Number	Package	Operating Temperature	Package Method	Marking
BP2522X	SOT33-5A	-40 ℃ to 105 ℃	Tape 7,500pcs/reel	BP2522 XXXXXY ZZZZWWX

Pin Configuration and Marking Information



XXXXXY: lot code
ZZZZ: Sign
WW: Week
X: MOSFET code

Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1	GND	Ground
2	SEL	Output voltage selection pin. To VCC: Vout= 12V; To GND Vout= 24V
3	VCC	Power supply pin
4	DRAIN	Drain of the integrated HV MOSFET
5	CS	Current Sense Pin. Connect a resistor to GND to sense the MOS current.

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