

High-Performance Quasi-Resonant Flyback Converter

General Description

PN8149 integrates a quasi-resonant current mode controller and power MOSFET inside, which is dedicated to AC-DC switching power supply with high performance and simplified peripheral components. PN8149 achieves ultra-low standby power consumption and the best efficiency under the full voltage range through QR-PWM, QR-PFM, Burst-mode three-mode hybrid modulation technology, and special device low-power structure technology. Frequency modulation technology and Soft Driver technology fully guarantee good EMI performance. PN8149 provides extremely comprehensive and intelligent protection functions with excellent performance, including over-temperature protection, output over-voltage protection, cycle-by-cycle over-current protection, output open / short-circuit protection, secondary rectifier short-circuit protection, and overload protection.

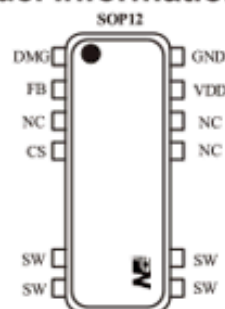
Features

- Built-in 800V high avalanche capability power MOSFET
- quasi-resonant operation
- Maximum switching frequency 125kHz
- Simplified peripherals, no need for start-up resistors
- The high and low-voltage pins are arranged up and down to improve creepage distance
- The built-in high-voltage startup, no-load standby power consumption <50mW @230VAC
- Excellent comprehensive protection function:
 - ※ Over Temperature Protection (OTP)
 - ※ Output Overvoltage Protection
 - ※ Cycle-by-Cycle Over-Current Protection (OCP)
 - ※ Output open/short circuit protection
 - ※ Secondary rectifier short circuit protection
 - ※ Overload Protection (OLP)

Applications

- Industry auxiliary power supply
- Adapter
- Open-frame switching-mode power supply

Package/Order Information



Order Code	Package
PN8149WSC-A2	SOP12

Typical Circuit

