

Integrated HV-startup circuit Synchronous Rectification Converter

General Description

PN8305 consists of a synchronous rectification controller and a N-channel power MOSFET, specifically designed for a high performance AC/DC flyback converter to replace traditional schottky barrier diode. PN8305 integrates a much lower voltage drop MOSFET to increase output current capability and efficiency, and simplify thermal design. PN8305 is suitable for multiple mode AC/DC flyback converter including DCM and QR mode. It operates in on-off operation mode. When the secondary-side current will flow through the body diode of SR MOSFET and the voltage at the drain will drop to about -400mV, the SR MOSFET will be turned on. When the current increases and the voltage at the drain will rise above -5mv, the SR MOSFET will be turned off. PN8305 offers complete protections including UVLO, over voltage clamp protection etc. PN8305 integrates HV-startup circuit and can support low system output voltage down to 2V.

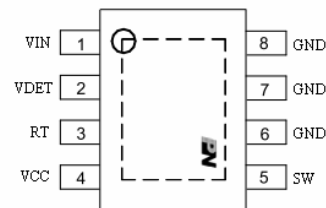
Features

- Internal 13mΩ/6mΩ 50V Trench MOSFET
- Internal HV Start-up Circuit
- Suitable for DCM,QR operation
- Accurate secondary-side current sensing
- Complete assistant functions
 - ◇ VDD UVLO
 - ◇ Over voltage clamp

Applications

- 5V Battery Charger and Adapter

Package/Order Information



Order codes	Package	Typical power
		85~265 V _{AC}
PN8305MSEC-R1	ESOP8	12W
PN8305HSEC-R1	ESOP8	15W

Typical Application

