

DESCRIPTION

RS2254 combines a dedicated current mode PWM controller with a high voltage power MOSFET. It is optimized for high performance, low standby power, and cost effective off-line flyback converter applications in sub 15W range.

RS2254 offers complete protection coverage with automatic self-recovery feature including Cycle-by-Cycle current limiting (OCP), over load protection (OLP), VDD over voltage clamp and under voltage lockout (UVLO). Excellent EMI performance is achieved with PTC proprietary frequency Jiggling technique together with soft switching control at the totem pole gate drive output. The tone energy at below 20KHz is minimized in the design and audio noise is eliminated during operation. RS2254 is offered in DIP-8 package.

APPLICATIONS

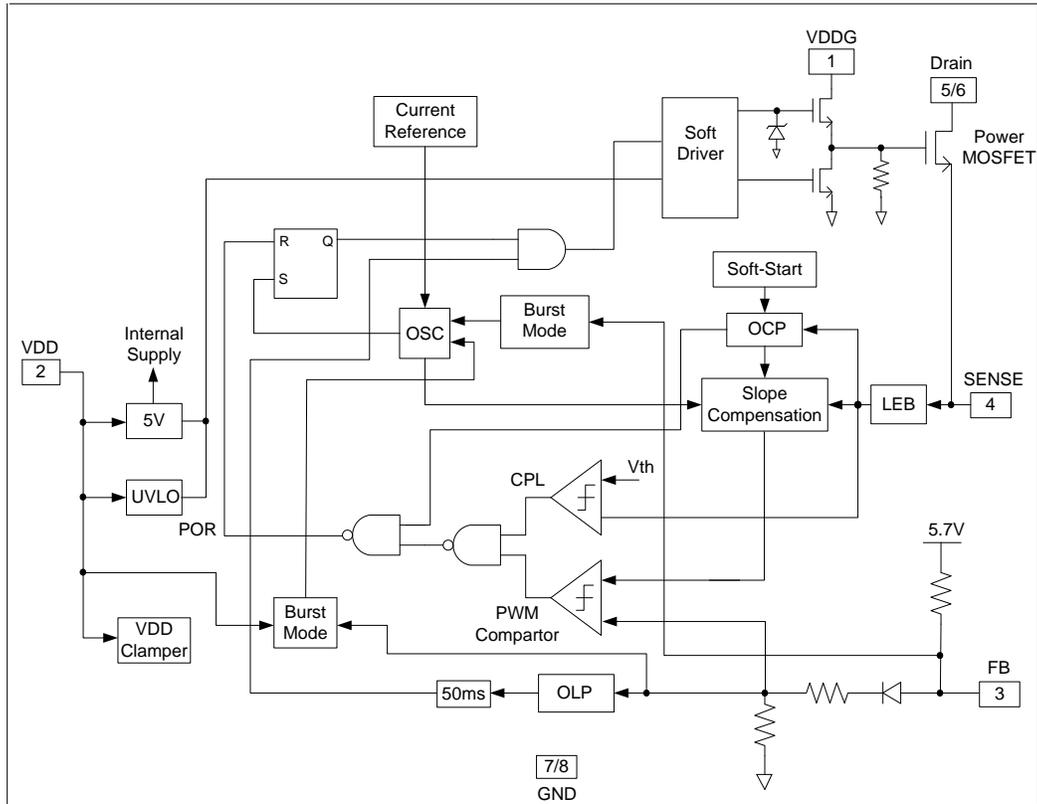
- Battery Charger
- Digital Cameras and Camcorder Adaptor
- PDA Power Supplies
- VCR, SVR, STB, DVD & DVCD Player SMPS
- Set-Top Box (STB) Power
- Auxiliary Power Supply for PC and Server
- Open-frame SMPS

FEATURES

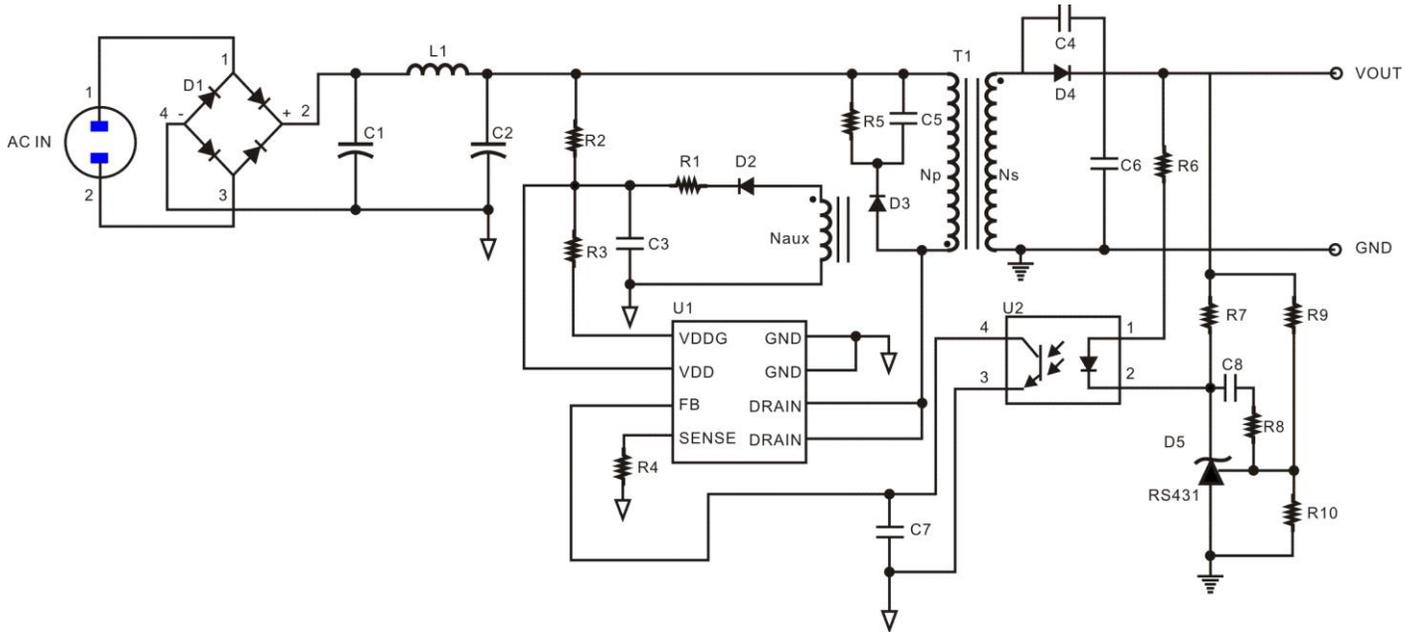
- Power on Soft Start Reducing MOSFET VDS Stress
- Frequency Jiggling to reduce EMI
- Burst Mode Control For Improved Efficiency and Minimum Standby power Design
- Audio Noise Free Operation
- Fixed 50KHz Switching Frequency
- Internal Synchronized Slope Compensation
- Low VDD Startup Current and Low Operating Current
- Leading Edge Blanking on Current Sense Input
- Good Protection Coverage With Auto Self-Recovery
 - VDD Over Voltage Clamp and Under Voltage Lockout with Hysteresis (UVLO)
 - Line Input Compensated Cycle-by-Cycle Over-current Threshold Setting For Constant Output Power Limiting Over Universal Input Voltage Range
 - Overload Protection (OLP)
 - Over Voltage Protection (OVP)
- DIP-8 Package
- RoHS Compliant and 100% Lead (Pb)-Free and Green (Halogen Free with Commercial Standard)



BLOCK DIAGRAM



APPLICATION CIRCUIT

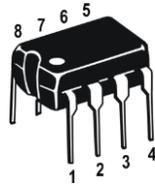


ORDER INFORMATION

Device	Device Code
RS2254 Y Z	<p>Y is package designator :</p> <p>P: DIP-8</p> <p>Z is Lead Free designator :</p> <p>P: Commercial Standard, Lead (Pb) Free and Phosphorous (P) Free Package</p> <p>G: Green (Halogen Free with Commercial Standard)</p>

PIN ASSIGNMENTS

DIP-8



PIN DESCRIPTION

Pin Name	Description	Pin No.
VDDG	Internal Gate Driver Power Supply Pin	1
VDD	DC Power Supply Input Pin	2
FB	Feedback input Pin. The PWM duty cycle is determined by voltage level into this pin and the current-sense signal at Pin 4	3
SENSE	Current Sense Input Pin	4
DRAIN	HV MOSFET Drain Pin. The Drain pin is connected to the primary lead of the transformer	5, 6
GND	Ground Pin	7, 8

IMPORTANT NOTICE

Princeton Technology Corporation (PTC) reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and to discontinue any product without notice at any time.

PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

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