DESCRIPTION

RS2138A is a high performance offline PSR controller for low power AC/DC charger and adapter applications, Less than 75mW standby power consumption with typical application. It operates in primary-side sensing and regulation, so opto-coupler and TL431 could be eliminated. In CC control, the current and output power can be adjusted externally by the sense resistor RS at CS pin. In CV control, a PFM operation is utilized to achieve high performance and high efficiency. In addition, good load regulation is achieved by the built-in cable drop compensation.

RS2138A offers comprehensive protection coverage with auto-recovery features including Cycle-by-Cycle current limiting, VDD over voltage protection, VOUT over voltage protection, feedback loop open protection, short circuit protection, built-in leading edge blanking, VDD under voltage lockout (UVLO).

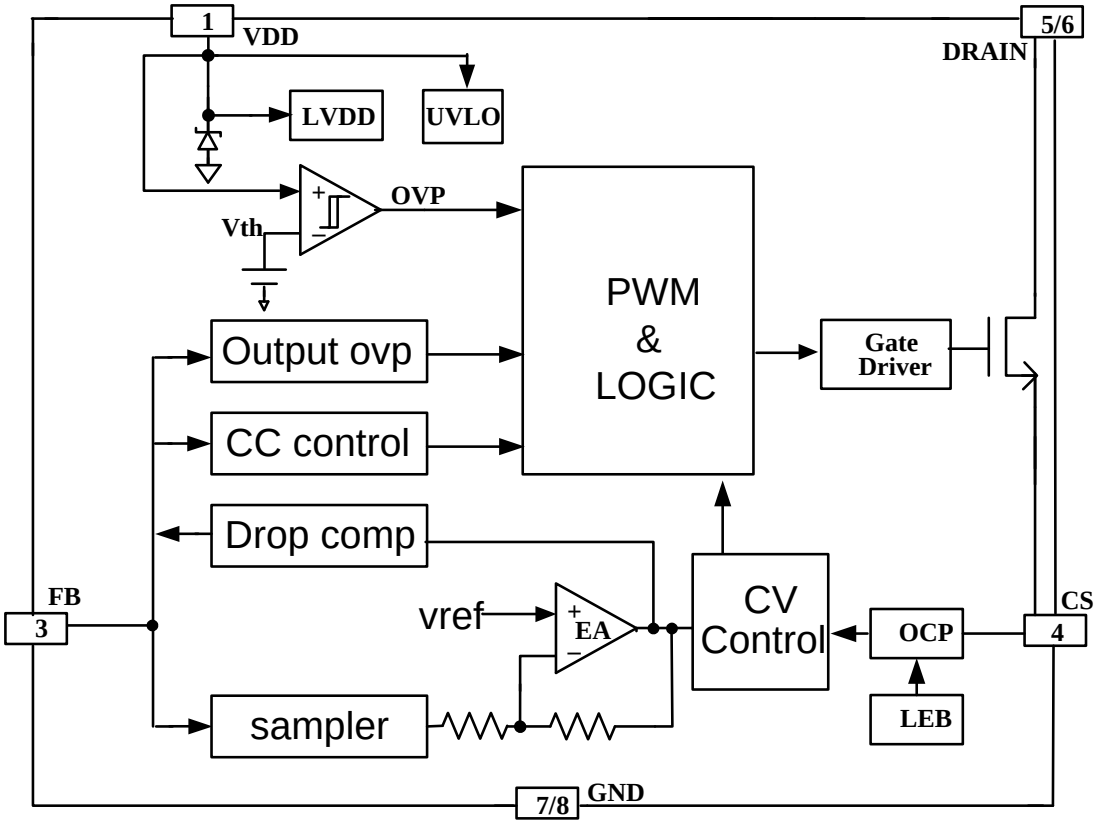
FEATURES

- Standby power less than 75mW
- Primary-side Sensing and Regulation Without TL431 and Opto-coupler
- High precision constant voltage and current regulation at Universal AC input
- Programmable CV and CC Regulation
- Multi-mode PWM/PFM operation for efficiency improving
- Audio noise free operation
- Programmable Cable Drop Compensation
- Built-in line voltage and primary winding inductance compensation
- No need for control loop compensation
- Built-in Feedback Loop Open Protection
- VDD Over Voltage Protection
- VOUT Over Voltage Protection
- Built-in Short Circuit Protection
- Built-in Leading Edge Blanking (LEB)
- Over temperature protection(OTP)
- Cycle-by-Cycle Current Limiting
- VDD Under Voltage Lockout with Hysteresis (UVLO)
- DIP-8L green Package

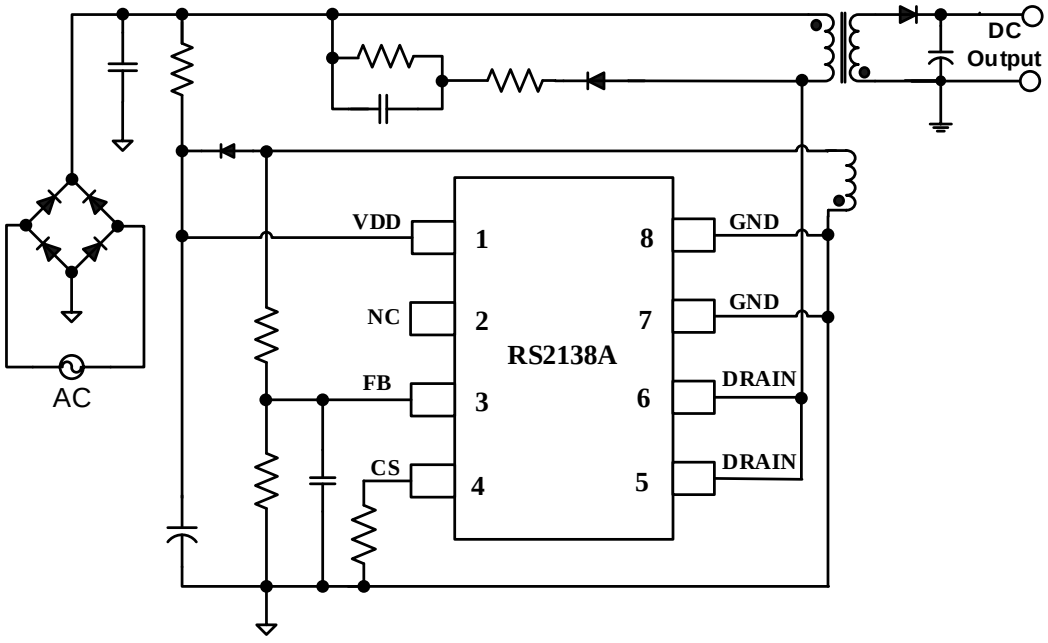
APPLICATIONS

- Switching AC/DC Small Power Adaptor
- Cell Phone Charger
- Digital Cameras Charger
- Auxiliary Power for PC, TV etc
- Linear Regulator/RCC Replacement

BLOCK DIAGRAM



APPLICATION CIRCUIT

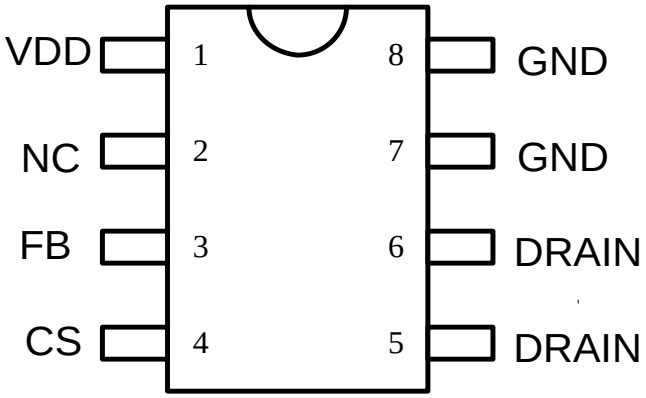


ORDER INFORMATION

DEVICE	DEVICE CODE
RS2138A Y	**Y** is package & Pin Assignments designator : P : DIP-8

PIN CONFIGURATION

DIP-8



PIN DESCRIPTION

Pin Name	Description	Pin No
VDD	Power Supply	1
NC	No Connection	2
FB	The voltage feedback from auxiliary winding. Connected to resistor divider from auxiliary winding reflecting out voltage.	3
CS	Current sense input	4
DRAIN	Drain of internal power MOSFET	5/6
GND	GND Pin	7/8

IMPORTANT NOTICE

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