DESCRIPTION

RS2122A is a high performance offline PSR controller for low power AC/DC charger and adapter applications. It operates in primary-side sensing and regulation, so opto-coupler and TL431 could be eliminated. In CC control, the current and output power setting can be adjusted externally by the sense resistor R_S at CS pin. In CV control, PFM operations are utilized to achieve high performance and high efficiency. In addition, good load regulation is achieved by the built-in cable drop compensation.

The chip consumes very low operation current (typical 650µA), it can achieve less than 30mW standby power to meet strict standby power standard. RS2122A offers comprehensive protection coverage with auto-recovery features including Cycle-by-Cycle current limiting, VDD over voltage protection, feedback loop open protection, CS open protection, Output short circuit protection, built-in leading edge blanking, VDD under voltage lockout (UVLO), Over temperature protection, etc. RS2122A is offered in SOP-7L package.
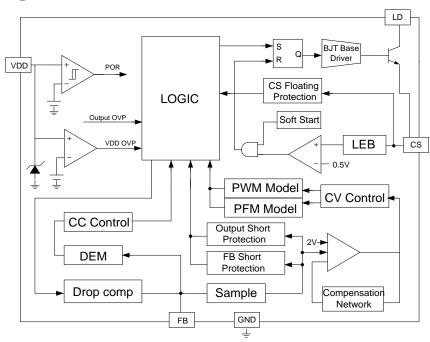
FEATURES

- Low startup current
- ±4% CC and ±5% CV Precision
- 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
- Built-in Primary winding inductance compensation
- Programmable Cable Drop Compensation
- Built-in Feedback Loop Open Protection
- Built-in CS Open Protection
- VDD Over Voltage Protection
- Built-in Output 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)
- SOP-7L green Packaging

APPLICATIONS

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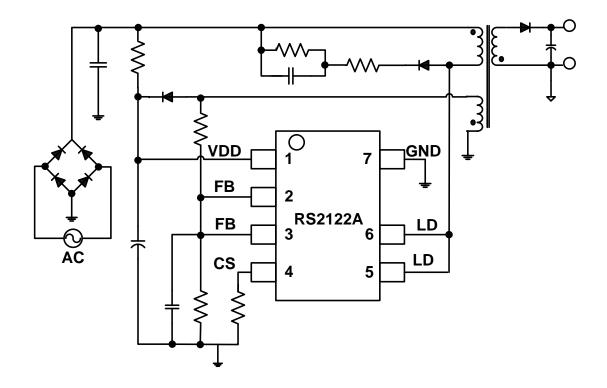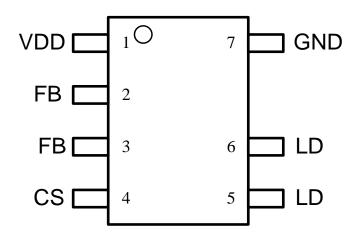- Auxiliary Power for PC, TV etc
- Linear Regulator/RCC Replacement

BLOCK DIAGRAM

APPLICATION CIRCUIT

ORDER INFORMATION

Device	Device Code
RS2122A Y	**Y** is package & Pin Assignments designator : S : SOP7

PIN CONFIGURATION

SOP-7

VDD	1 ◯	7	GND
FB	2		
FB	3	6	LD
CS	4	5	LD

PIN DESCRIPTION

Pin Name	Description	Pin No
VDD	Supply voltage pin.	1
FB	Voltage feedback pin.	2, 3
CS	Current sense pin, a resistor connects to sense the NPN current.	4
LD	NPN collect	5, 6
GND	Supply voltage pin. GND Pin.	7

IMPORTANT NOTICE

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Princeton Technology Corp.
2F, 233-1, Baociao Road,
Sindian Dist., New Taipei City 23145, Taiwan
Tel: 886-2-66296288
Fax: 886-2-29174598
http://www.princeton.com.tw