

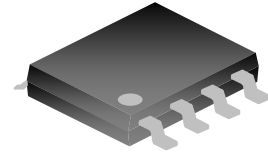
# PRIMARY SIDE REGULATOR WITH BUILT-IN HIGH VOLTAGE TRANSISTOR

## 1. DESCRIPTION

SD8530AS is primary side regulator (PSR) with built-in high voltage transistor. It provides built-in cable drop compensation and peak current compensation. It adopts PFM technology and provides accurate constant voltage, constant current (CV/CC) control loop for high average efficiency and reliability.

Using SD8530AS for system design, few peripheral components are needed without requiring the Opto-coupler, Y capacitor, secondary control circuit and the loop compensation circuit which reduced the cost.

6W output power is recommended for SD8530AS in range of AC85~264V.



SOP-7-225-1.27

## 2. FEATURES

- ◆ Built-in high voltage transistor
- ◆ Primary side control
- ◆ Low start-up current
- ◆ Leading edge blanking
- ◆ Pulse-Frequency Modulation
- ◆ Overvoltage protection
- ◆ Undervoltage lockout
- ◆ Short circuit protection
- ◆ Over temperature protection
- ◆ Open Loop Protection
- ◆ Cable drop compensation
- ◆ Peak current compensation
- ◆ Cycle by cycle current limiting

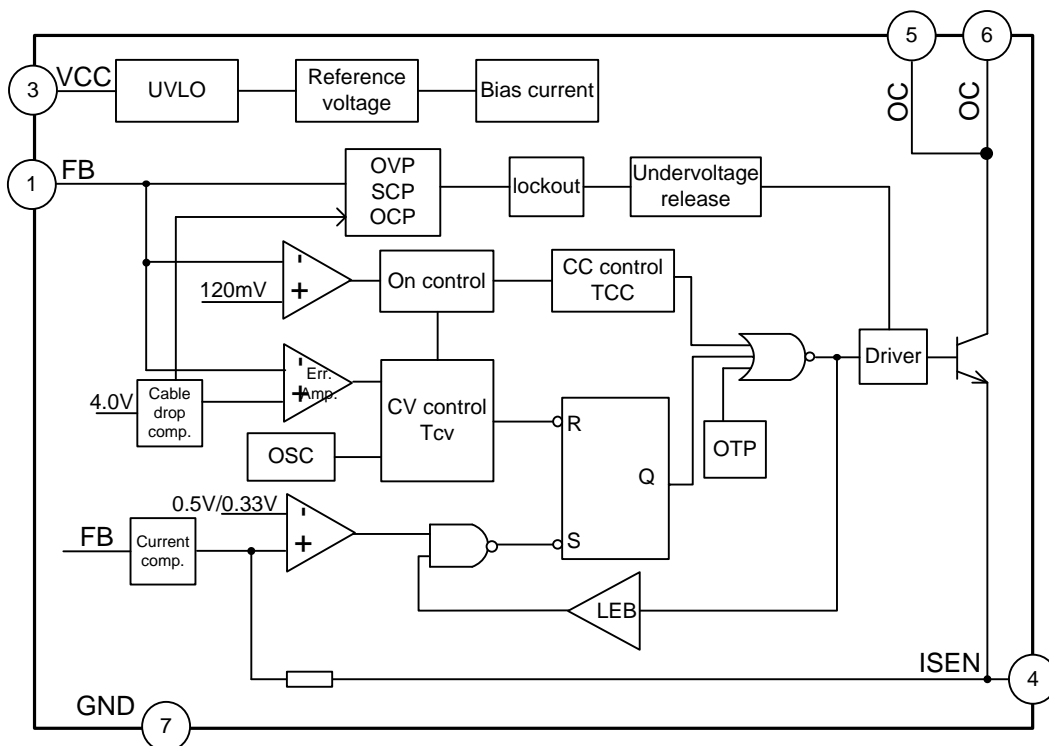
## 3. APPLICATIONS

- ◆ Chargers for Cell Phones
- ◆ Adapters with small power
- ◆ MP3 and Other Portable Apparatus
- ◆ Standby Power Supply

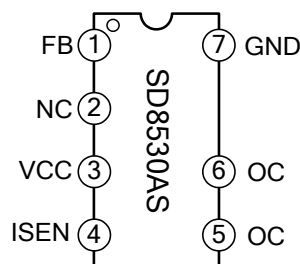
4. ORDERING INFORMATION

Part No.	Cable drop compensation	Package	Marking	Hazardous Substance Control	Packing Type
SD8530AS	6%	SOP-7-225-1.27	SD8530AS	Halogen free	Tube
SD8530ASTR	6%	SOP-7-225-1.27	SD8530AS	Halogen free	Tape & Reel

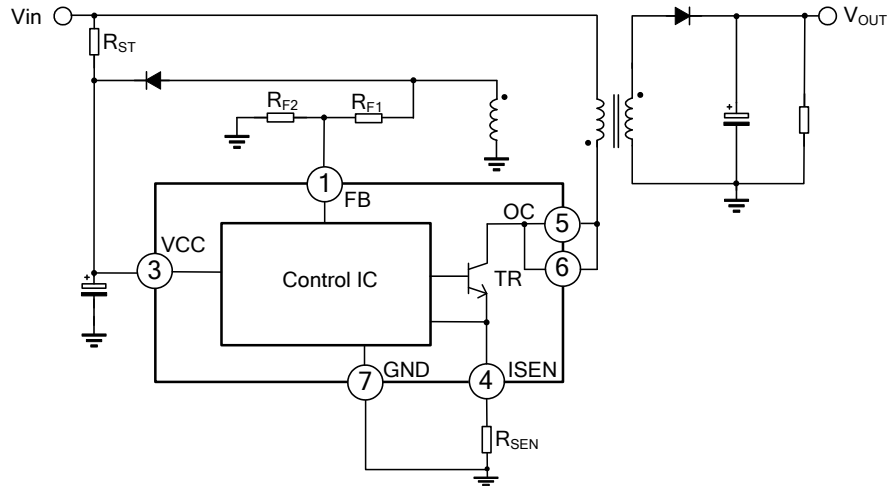
5. BLOCK DIAGRAM



6. PIN CONFIGURATION



7.TYPICAL APPLICATION CIRCUIT



8.PACKAGE OUTLINE

SOP-7-225-1.27 UNIT: mm

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	—	—	1.80
A1	0.05	0.15	0.25
A2	1.25	—	1.65
b	0.33	0.42	0.51
c	0.17	0.20	0.26
D	4.70	4.90	5.10
E	5.80	6.00	6.20
E1	3.70	3.90	4.10
e	1.27BSC		
L	0.40	—	1.27

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