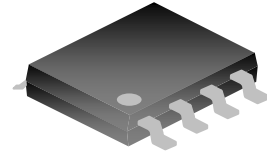


# HIGH PRECISION CC/CV PRIMARY SIDE POWER CONTROLLER WITH INTEGRATED MOSFET

## 1. DESCRIPTION

SDH8595AS is an offline PSR power switch which operates in PFM to achieve high performance and high efficiency. It integrates a 600V MOSFET and high voltage start up to decrease physical volume. Both the output current and voltage are sensed by primary side signal process.

SDH8595AS removes the need for secondary feedback circuitry while achieving excellent line and load regulation. It also eliminates the need for loop compensation while maintaining stability over all operation conditions.



SOP-7-225-1.27

## 2. FEATURES

- ◆ Primary-side Feedback Eliminates Opto-isolators and Simplifies Design
- ◆ High Precision Constant Voltage and Current Regulation at Universal AC Input
- ◆ Ultra Low Start-up Current
- ◆ Programmable CV and CC Regulation
- ◆ Programmable Cable Drop Compensation
- ◆ Integrated 600V MOSFET
- ◆ Integrated High Voltage Start Up
- ◆ Less Than 75mW Standby Power
- ◆ Built-in Line Voltage and Primary Winding Inductance Compensation
- ◆ Built in Leading Edge Blanking(LEB)
- ◆ PFM Operation for Efficiency Improving
- ◆ No External Compensation Required
- ◆ Comprehensive Protection Coverage with Auto-recovery
- ◆ On-chip OTP
- ◆ VCC Over Voltage Protection
- ◆ VCC Under Voltage Lockout with Hysteresis(UVLO)
- ◆ Cycle-by-Cycle Current Limiting
- ◆ Output Short Circuit Protection
- ◆ Over Current Protection
- ◆ Maximum on time protection

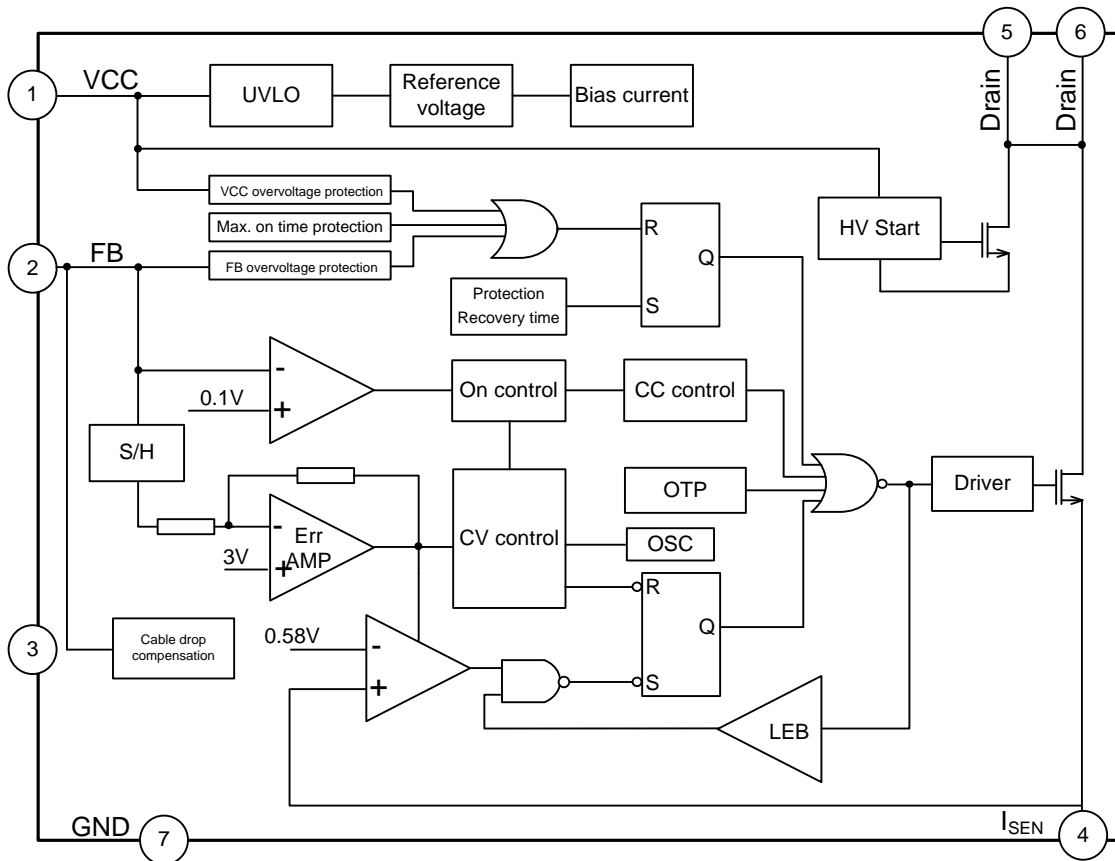
## 3. APPLICATIONS

- ◆ AC/DC adapters
- ◆ Battery Chargers

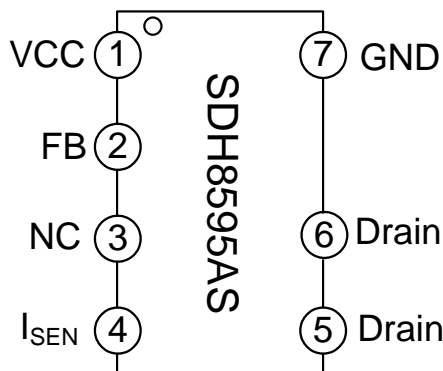
4. ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SDH8595AS	SOP-7-255-1.27	SDH8595AS	Halogen free	Tube
SDH8595ASTR	SOP-7-255-1.27	SDH8595AS	Halogen free	Tape & Reel

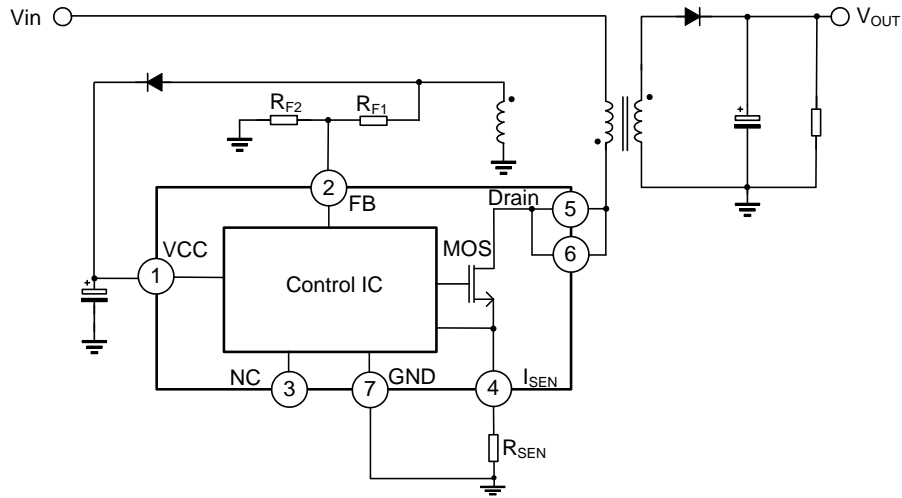
5. BLOCK DIAGRAM



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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