

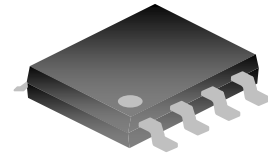
NON-ISOLATED AC TO DC CONTROLLER

1. DESCRIPTION

SDH8312 is AC-DC controller with built-in 650V MOSFET used for SMPS.

SDH8312 integrates high-voltage circuit and self-power function for fast startup and low standby power dissipation. It features the frequency reduction function to optimize the conversion efficiency at light load; the soft startup function reduces the device stress to avoid transformer saturation.

SDH8312 integrates various protections, including VDD undervoltage protection, open loop protection, output overload protection, output short-circuit protection, over temperature protection, etc. Meanwhile, if any protection occurs, the circuit will continue to restart automatically until the system recovers.



SOP-8-225-1.27

2. FEATURES

- ◆ Adjustable output voltage
- ◆ High-voltage self-startup
- ◆ Adaptive Frequency reduction
- ◆ Soft startup
- ◆ VDD under voltage protection
- ◆ FB open-loop protection
- ◆ Lead edge blanking
- ◆ Output overload protection
- ◆ Short-circuit protection
- ◆ Over temperature protection

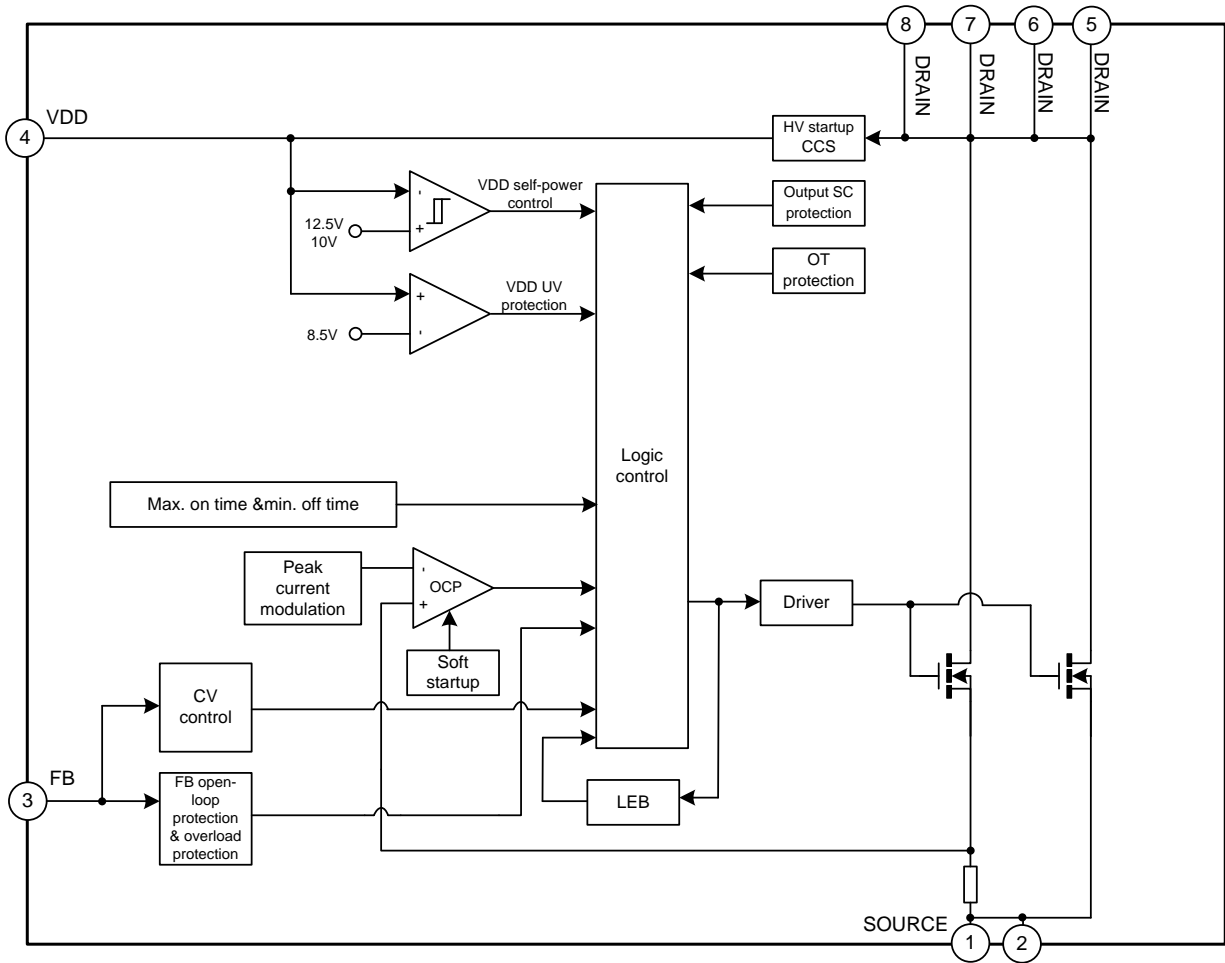
3. APPLICATIONS

- ◆ Small house-hold appliances
- ◆ Non-isolated auxiliary power supply

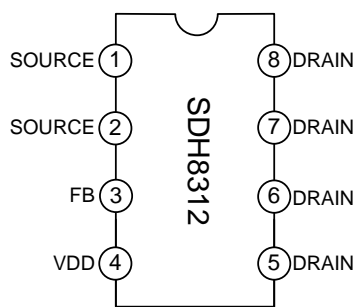
4. ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SDH8312	SOP-8-225-1.27	SDH8312	Halogen free	Tube
SDH8312TR	SOP-8-225-1.27	SDH8312	Halogen free	Tape & Reel

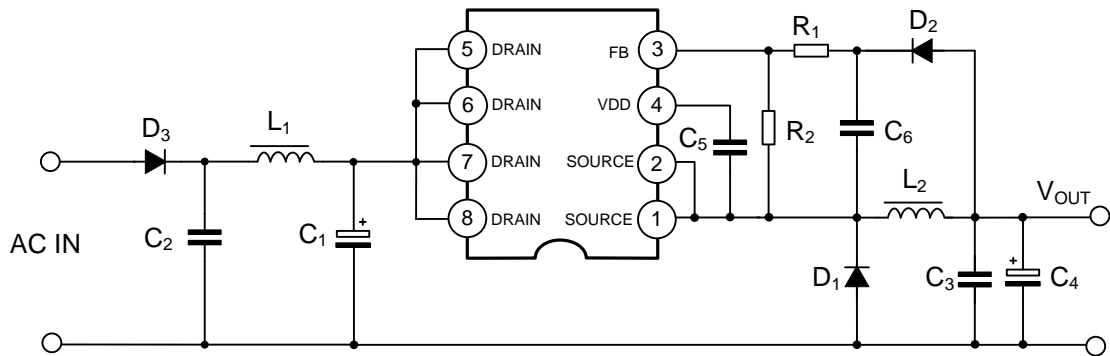
5. BLOCK DIAGRAM



6. PIN CONFIGURATION



7. TYPICAL APPLICATION CIRCUIT



8. PACKAGE OUTLINE

SOP-8-225-1.27 UNIT: mm

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.05	0.15	0.25
A2	1.25	—	1.65
b	0.32	0.42	0.52
c	0.15	0.20	0.26
D	4.70	4.90	5.30
E	5.60	6.00	6.40
E1	3.60	3.90	4.20
e	1.27BSC		
L	0.30	—	1.27

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