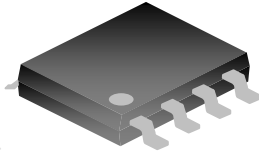


150V NON-ISOLATED DC TO DC CONTROLLER

1.DESCRPTION

SD4943S is a current - mode PWM controller with a built - in 150V high - voltage MOSFET for switching power supplies. It will enter the burst mode under light load, thus effectively reducing the standby power dissipation of the system.

The SD4943S features high - voltage start - up, self - power supply, frequency reduction, and soft start. Various protection functions, it also integrates various protections including: VDD undervoltage protection, VDD overvoltage protection, output overload protection, output short - circuit protection, over - temperature protection, etc. After the protection is triggered, the circuit will automatically restart until the system is normal.



SOP-8-225-1.27

2.FEATURES

- ◆ 16V~150V input voltage
- ◆ Adjustable output voltage
- ◆ High-voltage self-power
- ◆ Frequency reduction at light load condition
- ◆ Optimized load regulation
- ◆ Soft startup
- ◆ VDD undervoltage protection
- ◆ Output overvoltage protection
- ◆ Output overload protection
- ◆ Over temperature protection

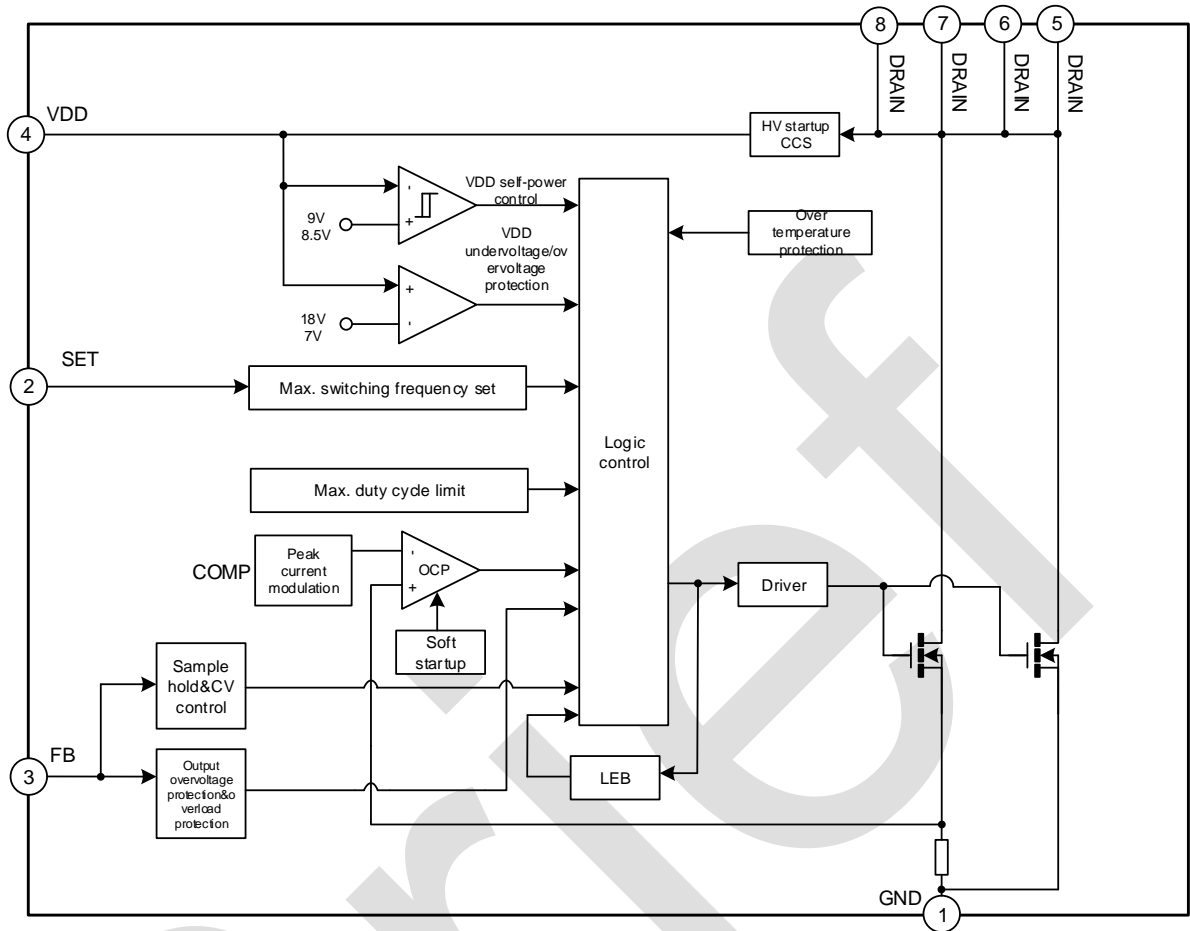
3.APPLICATIONS

- ◆ Balance wheel
- ◆ Ethernet power
- ◆ E-bike
- ◆ Electric tool

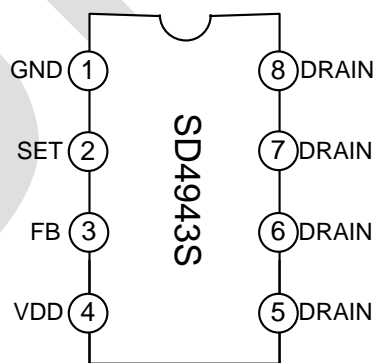
4.ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD4943S	SOP-8-225-1.27	SD4943S	Halogen free	Tube
SD4943STR	SOP-8-225-1.27	SD4943S	Halogen free	Tape&Reel

5. BLOCK DIAGRAM



6. PIN CONFIGURATION



7.TYPICAL APPLICATION CIRCUIT

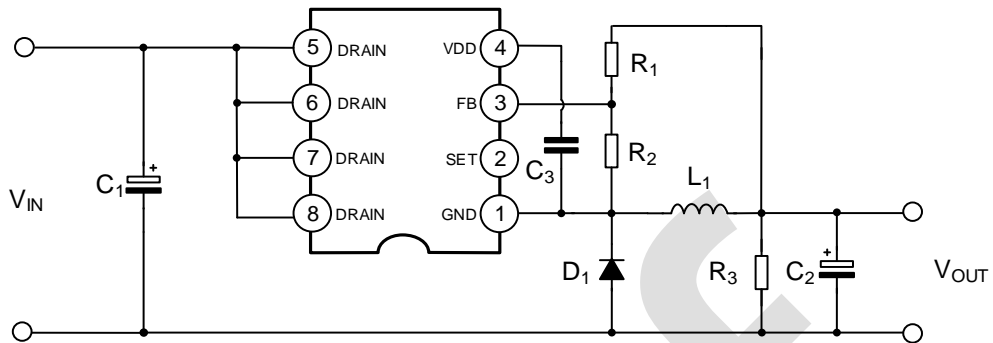


Figure 1: Application circuit diagram

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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