

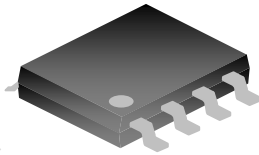
# 150V NON-ISOLATED DC TO DC CONTROLLER

## 1.DESCRPTION

SD4945 is DC-DC controller with built-in 150V high-voltage MOSFET used for SMPS.

SD4945 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.

SD4945 integrates various protections, including VDD undervoltage protection, output overload protection, output overvoltage 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

- ◆ 18V~150V input voltage
- ◆ Adjustable output voltage
- ◆ High-voltage startup
- ◆ Frequency reduction at light load condition
- ◆ Optimized load regulation
- ◆ Soft startup
- ◆ VDD undervoltage protection
- ◆ Output overvoltage protection
- ◆ Lead edge blanking
- ◆ 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
SD4945	SOP-8-225-1.27	SD4945	Halogen free	Tube
SD4945TR	SOP-8-225-1.27	SD4945	Halogen free	Tape&Reel

5. TYPICAL APPLICATION CIRCUIT

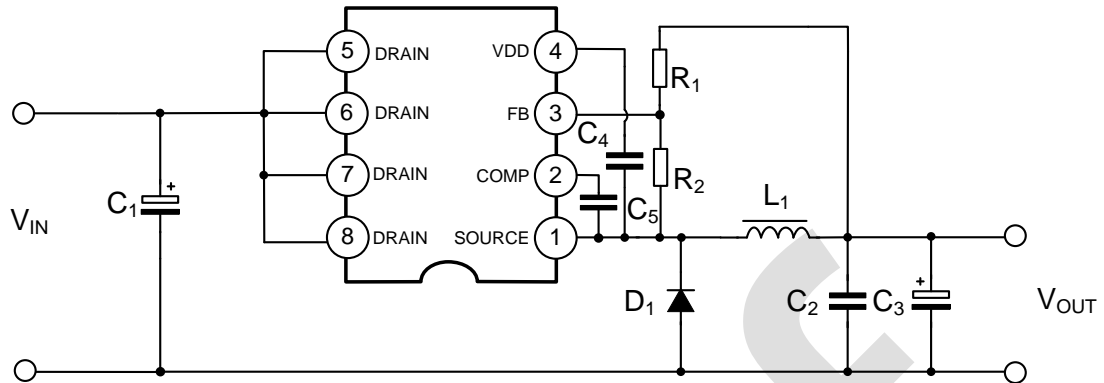


Figure 1: Application circuit diagram

6. 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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