

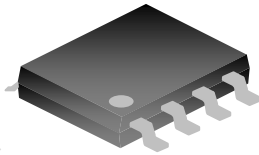
# 150V CURRENT MODE PWM CONTROLLER

## 1.DESCRPTION

SD4938 is a current mode PWM controller with 150V MOSFET used for SMPS.

SD4938 integrates high-voltage start-up circuit. It enters burst mode at light load to reduce the system standby power dissipation; the frequency reduction function optimizes the conversion efficiency at light load; the soft startup function reduces the stress of device to avoid transformer saturation.

SD4938 features various protections, including VDD undervoltage protection, VDD overvoltage protection, lead edge blanking, over current 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

- ◆ Input voltage: 20V~150V
- ◆ Adjustable output voltage including: 12V, 15V and 18V
- ◆ Output current: 0.5A
- ◆ High-voltage self-startup
- ◆ Burst mode at light load
- ◆ Frequency reduction
- ◆ Soft startup
- ◆ VDD undervoltage protection
- ◆ VDD overvoltage protection
- ◆ Leading edge blanking
- ◆ Output overload protection
- ◆ Over current protection
- ◆ Over temperature protection

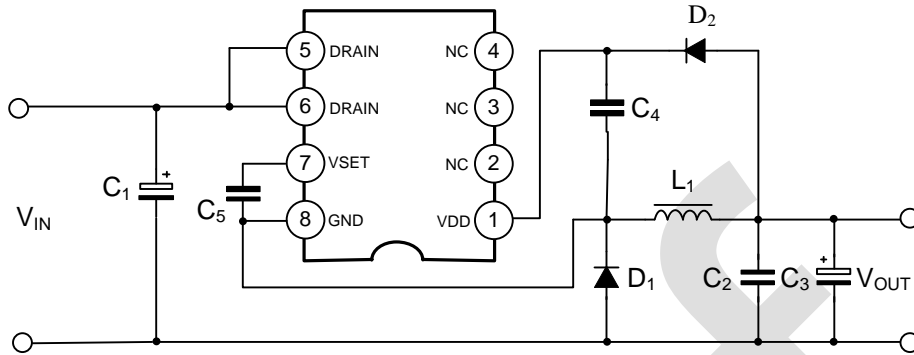
## 3.APPLICATIONS

- ◆ Balance wheel
- ◆ PoE
- ◆ E-bike
- ◆ Electric tool

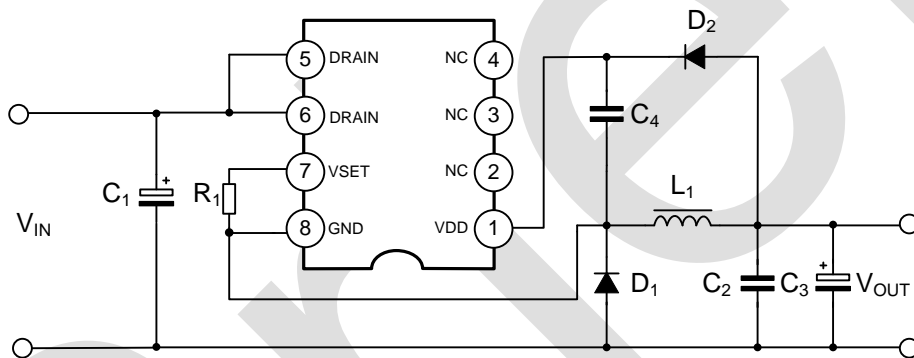
## 4.ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD4938	SOP-8-225-1.27	SD4938	Halogen free	Tube
SD4938TR	SOP-8-225-1.27	SD4938	Halogen free	Tape&Reel

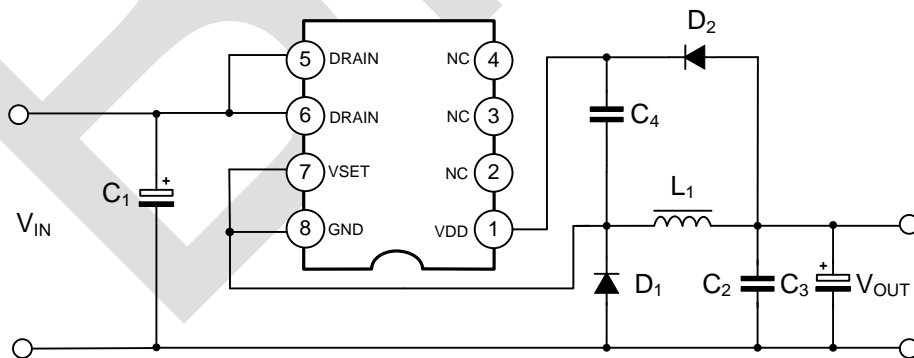
5. TYPICAL APPLICATION CIRCUIT



12V/0.3A output

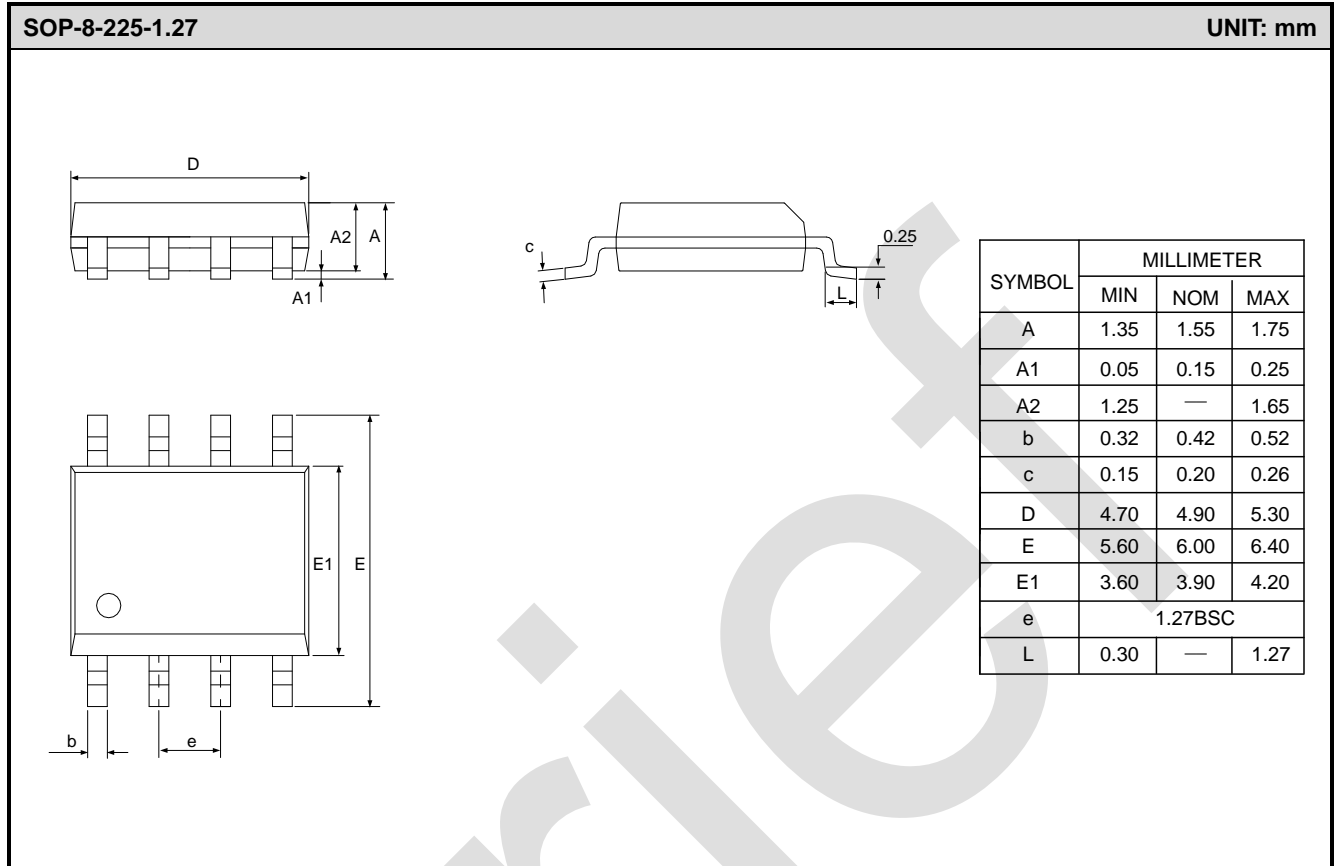


18V/0.3A output



15V/0.3A output

6.PACKAGE OUTLINE



**Important notice :**

1. Silan reserves the right to make changes of this instruction without notice.
2. Customers should obtain the latest relevant information when purchasing and should verify whether such information is latest and complete. Please read this instruction and application manual and related materials carefully before using products, including the circuit operation precautions, etc.
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