

POWERED DEVICE (PD) AND DC/DC CONTROLLER COMPATIBLE WITH IEEE 802.3AF STANDARD

1. DESCRIPTION

SD4954B is an Ethernet powered device and DC/DC controller IC compatible with IEEE 802.3af standard. It provides powered devices (PD) with functions of detection, classification and inrush current limit.

SD4954B integrates a 100V power MOSFET with on-resistance of 0.6 Ω , and features built-in current limit, undervoltage protection and over temperature protection.

The DC/DC controller integrates a 200V power MOSFET with SSR control. It is suitable for Flyback and buck topology, providing accurate CV control loop. It features high system efficiency and good EMI characteristic.

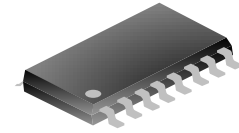
2. FEATURES

PD controller

- ◆ IEEE 802.3af Compliant
- ◆ 100V 0.6 Ω On-chip MOSFET
- ◆ Undervoltage lockout
- ◆ Over temperature protection
- ◆ 180mA inrush current limit
- ◆ 850mA operating current
- ◆ Fault automatic retry

DC/DC controller

- ◆ Fixed switching frequency control
- ◆ Internal error amplifier
- ◆ Leading-Edge Blanking
- ◆ Maximum duty cycle limit
- ◆ No-load sleep mode
- ◆ Soft startup
- ◆ Internal 200V MOSFET
- ◆ VCC over voltage protection
- ◆ VCC undervoltage lockout
- ◆ Over temperature protection
- ◆ Over load protection
- ◆ Cycle-by-cycle current limit



SOP-16-225-1.27

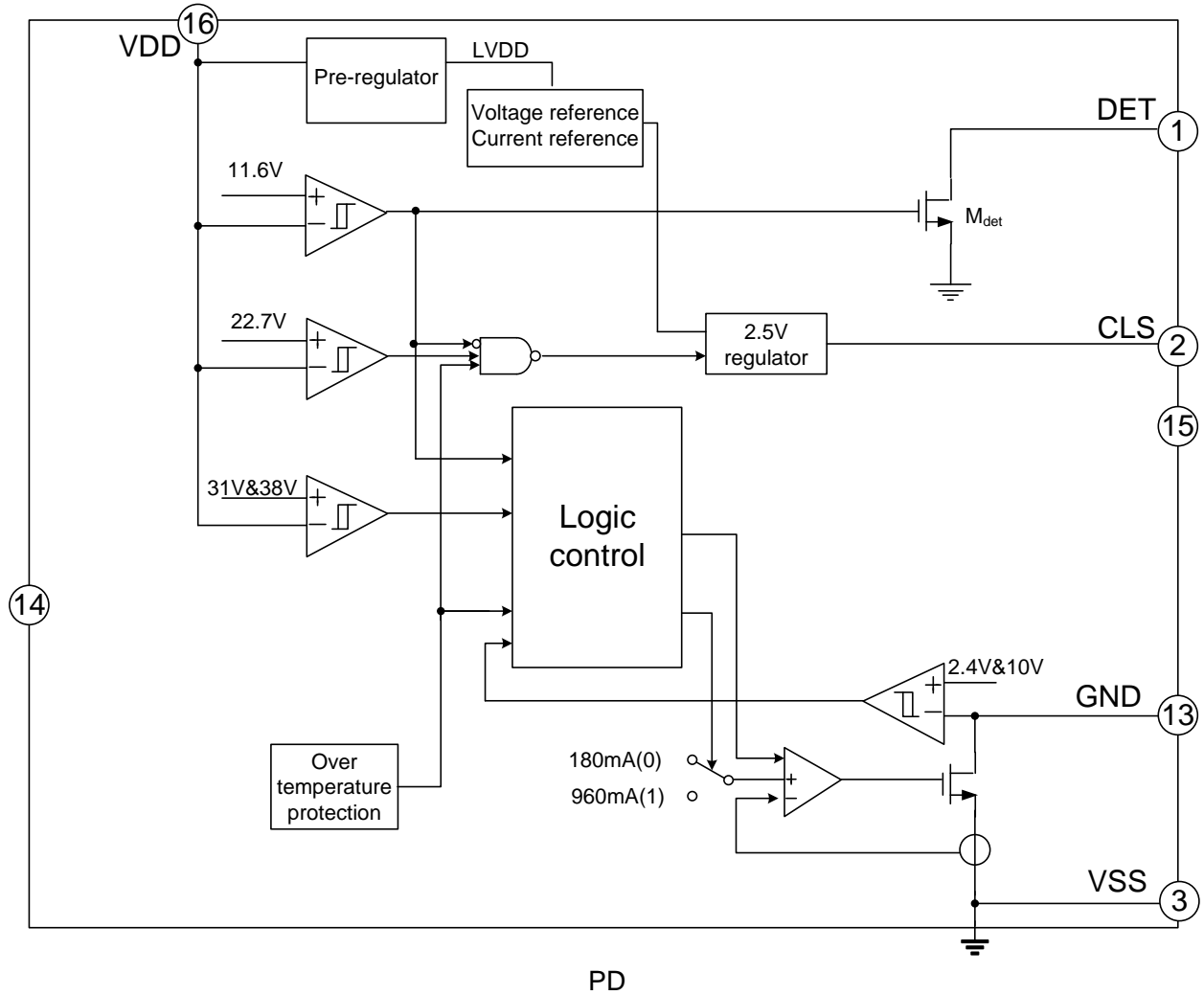
3. APPLICATIONS

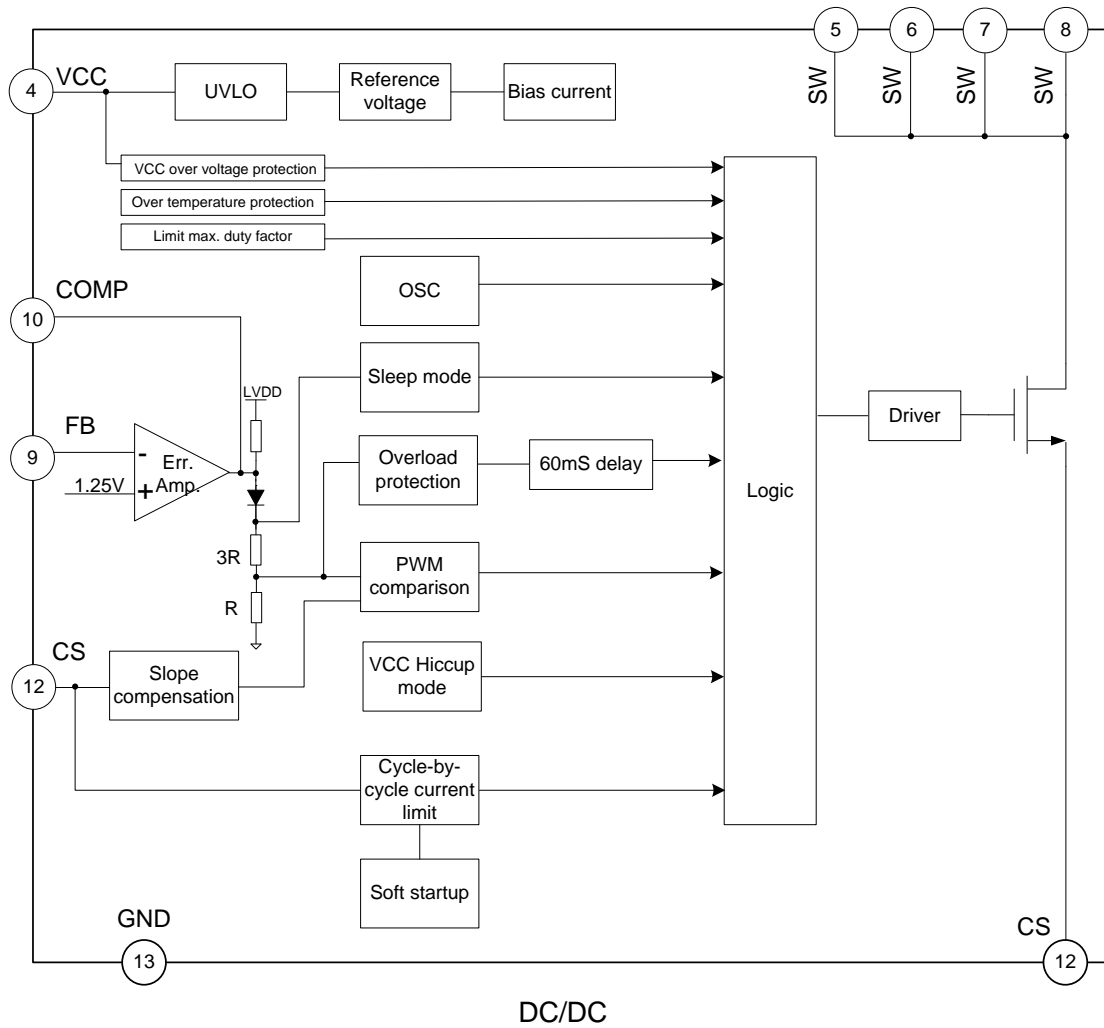
- ◆ Security Cameras
- ◆ IP phones
- ◆ Wireless Access Points

4. ORDERING INFORMATION

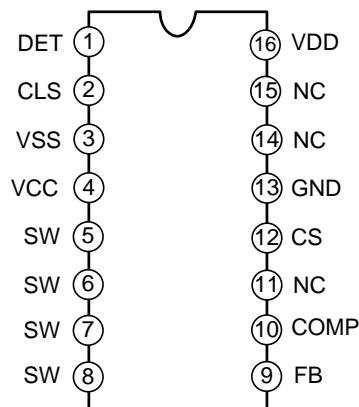
Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD4954B	SOP-16-225-1.27	SD4954B	Halogen free	Tube
SD4954BTR	SOP-16-225-1.27	SD4954B	Halogen free	Tape&Reel

5. BLOCK DIAGRAM

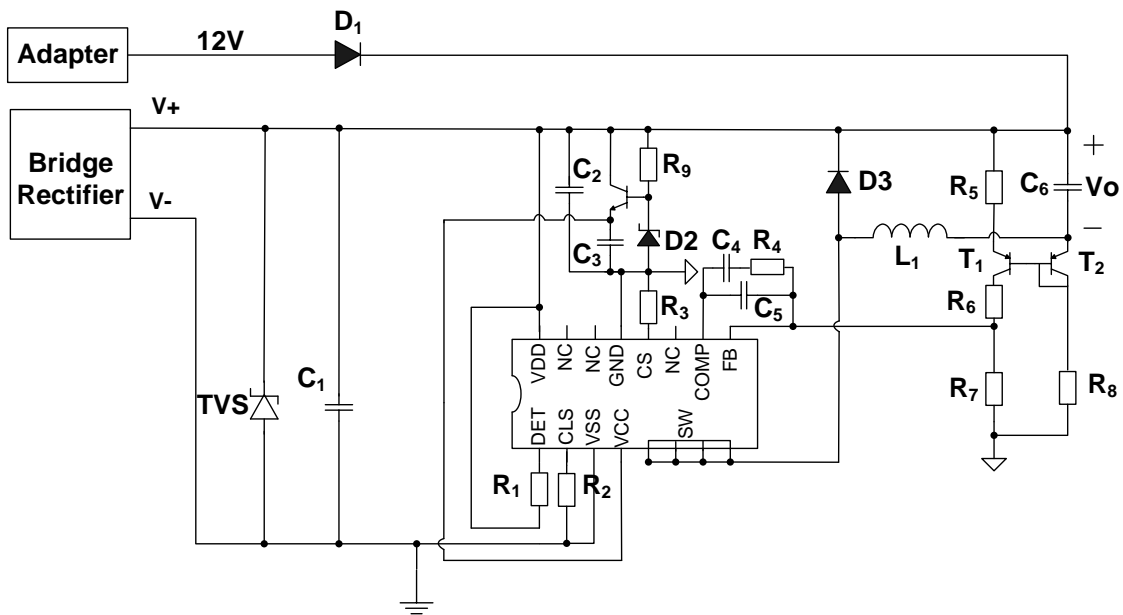
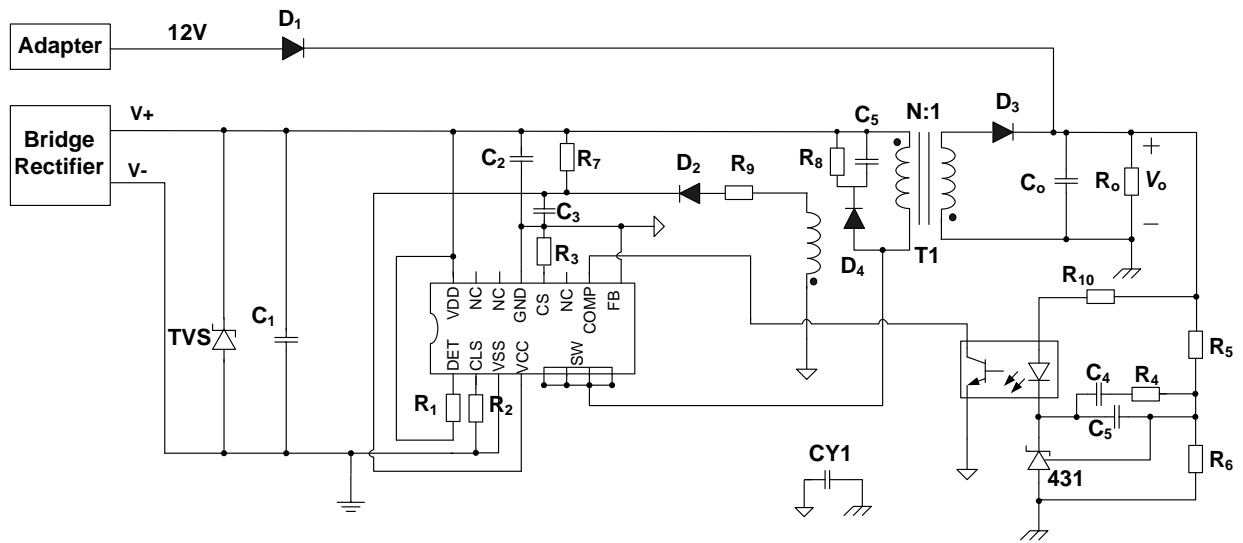




6. PIN CONFIGURATION

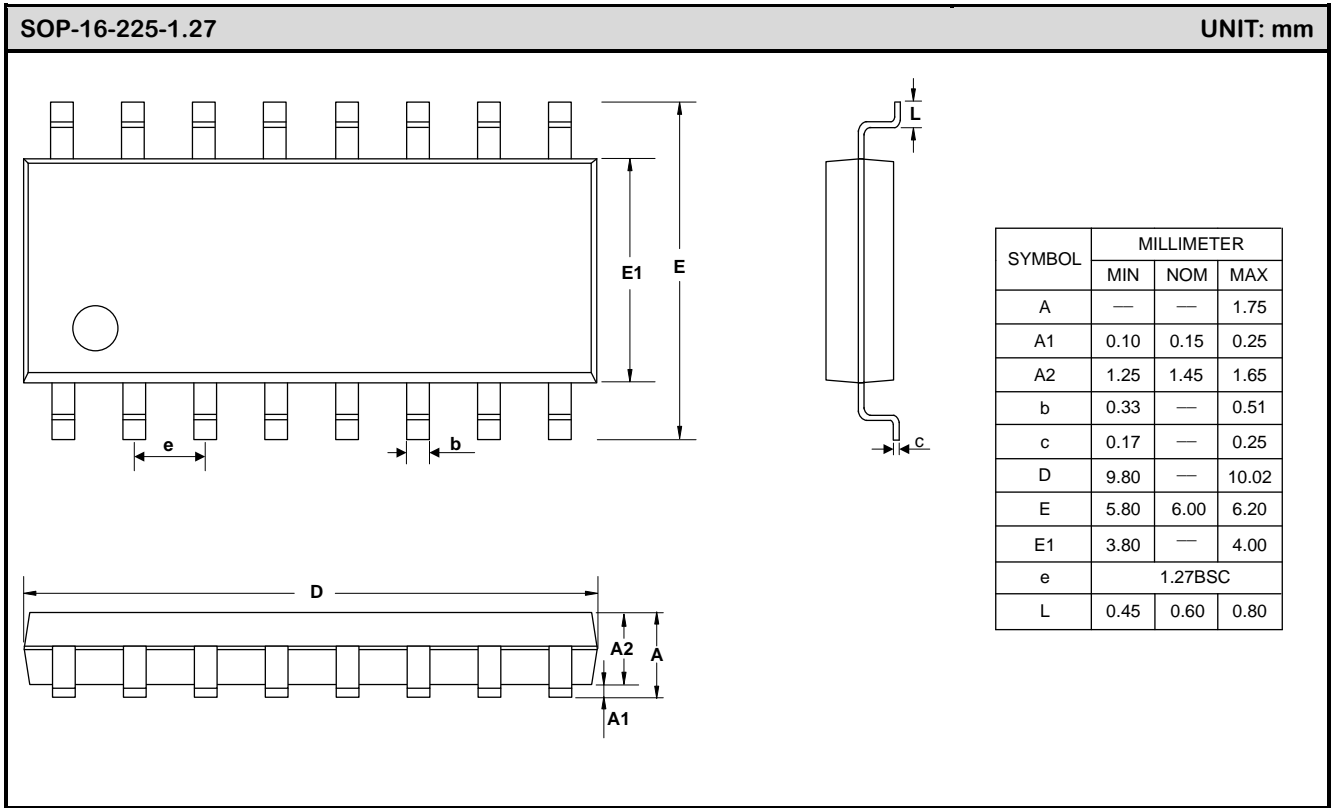


7.TYPICAL APPLICATION CIRCUIT



Note: The circuit and parameters are for reference only; please set the parameters of the real application circuit based on the real test.

8. PACKAGE OUTLINE



Important notice :

1. The instructions are subject to change without notice !
2. Customers should obtain the latest relevant information before placing orders and should verify that such information is complete and current. Please read the instructions carefully before using our products, including the circuit operation precautions.
3. Our products are consumer electronic products or the other civil electronic products.
4. When using our products, please do not exceed the maximum rating of the products, otherwise the reliability of the whole machine will be affected. There is a certain possibility of failure or malfunction of any semiconductor product under specific conditions. The buyer is responsible for complying with safety standards and taking safety measures when using our products for system design, sample and whole machine manufacturing, so as to avoid potential failure risk that may cause personal injury or property loss.
5. It is strongly recommended to identify the trademark when buying our products. Please contact us if there is any question.
6. Product promotion is endless, our company will wholeheartedly provide customers with better products!
7. Website: <http://www.silan.com.cn>.