

# **BUCK LED DRIVER WITH 8~80V INPUT**

## 1.DESCRIPTION

The SD42530 is a buck LED driver with external power MOSFET, it can be used to drive one or more LEDs in series in BUCK mode. Its input voltage ranges from 8V to 80V, the output current is adjustable with good constant current accuracy. It provides built-in temperature protection, current limit protection, output short circuit protection, etc.

The SD42530 adopts current mode control which provides fast transient response, excellent constant current characteristic and simple loop stabilization design. It has high efficiency: 96% for buck mode.



SOT-23-6L

#### 2.FEATURES

- 8-80V input voltage range;
- External MOSFET;
- Linear dimming and PWM dimming;
- 350kHz fixed frequency;
- Closed-loop regulation, with high output current accuracy;
- Over temperature protection;
- Frequency jitter;
- Output short circuit protection;
- Cycle-by-cycle over current protection.

## 3.APPLICATIONS

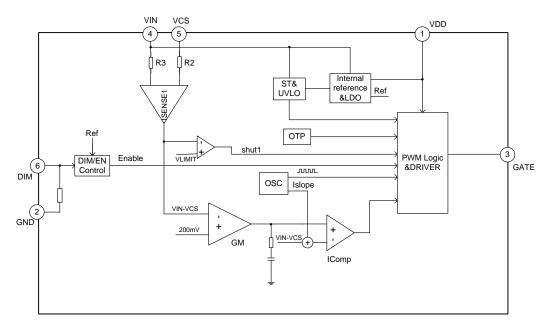
- LED street lamps
- Car LED headlights

#### 4.ORDERING INFORMATION

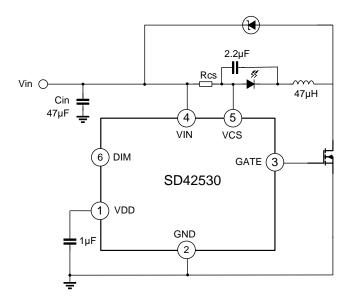
Part No.	Package	Hazardous Substance Control	Packing Type
SD42530TR	SOT-23-6L	Halogen free	Tape&Reel



## 5. BLOCK DIAGRAM



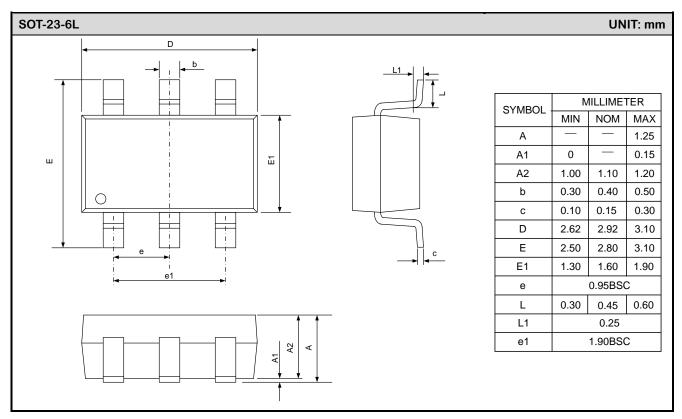
# **6.TYPICAL APPLICATION CIRCUIT**



Note: The circuit and parameters are for reference only, please set the parameters of application circuits based on real tests.



## 7.PACKAGE OUTLINE



## Important notice:

- 1. The instructions are subject to change without notice!
- 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.
- 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