Shenzhen Fuman Electronics Co., Ltd.

SHENZHEN FUMAN ELECTRONICS CO., LTD.

FM2819 (File number: S&CIC1083) LED

Miner's lamp control **IC**

One,　Overview

This IC is a special integrated circuit designed for LED miner's lamp, using the most advanced control technology and wide voltage design. Strengthens the durability of IC

It can be used to control LED lights of 3W or below, with current limiting protection function, over temperature protection function, output short circuit protection function, anti-reverse battery connection function

can.

The chip changes the current of the LED lamp by changing the size of the external resistor R1; it is controlled by tapping the switch button: strong light → dark light → flashing, so follow

Ring; when long press the button has SOS function.

two,　Features

　Working voltage: 2.5V~4.5V

　Working current: <1mA

　Working temperature: ≤85℃

　Maximum power consumption: 0.5uA

　Current limiting protection function

　Over-temperature protection function

　Output short circuit protection function

　Anti-reverse battery protection function

　Package: SOT23-6

three,　Applications

　Mainly used in high-power LED headlights and other lamps.

four,　Pin diagram and pin description

Serial number	Pin	Pin description
1	NC	Dangling
2	GND	Power negative
3	NC	Dangling
4	LED	Signal output (LED negative output)
5	SW	Trigger switch
6	VCC	Positive power supply

VCC 6　SW 5　LED 4

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N　GND　NC

SOT23-6

Fives,   Electrical parameters (Ta=25℃, VCC=3.7V, LED=1W unless otherwise stated)

symbol	parameter	Test Conditions		Minimum value	Typical value	Maximum	unit
Icc	Working current	After starting	bright	60	80	100	etc.
			1/4 bright	70	90	110	
			flicker	60	80	100	
			Extinguish	-	0	-	
			Long press SOS	60	80	100	
Vcc	Operating Voltage	start up		-	2.5	-	V
		Shut down		-	2.0	-	
f LED	LED switching waveform frequency	Half bright		-	sixteen	-	Khz
		flicker		-	8	-	HZ
Ron	On-resistance	-		-	110	-	mΩ
Imax	Maximum fluency	-		-	2.4	-	A
Thousand	Over temperature protection point	Shut down		-	190	-	℃
		restore		-	175	-	℃

6. Typical application circuit diagram