

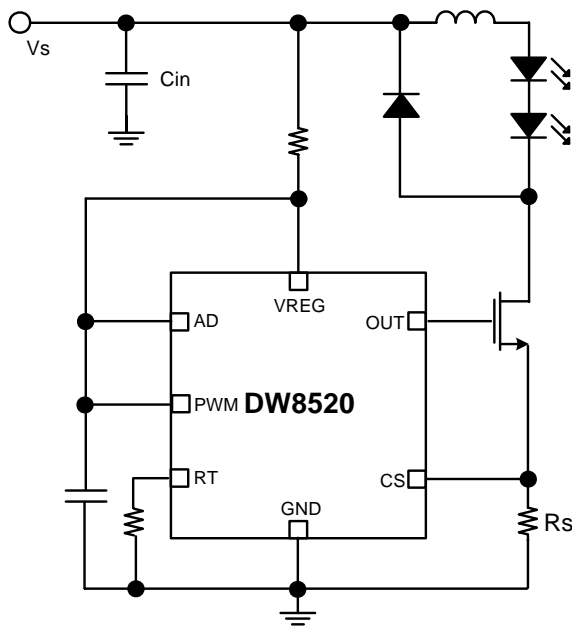
Features

- Topology : Switch mode controller (Buck)
- Application Input Voltage : 9V ~ 450V
- Efficiency : Up to 90%
- Current Control : Linear & PWM dimming
- Quiescent Current : Typical 0.5mA
- Switching Frequency : Constant frequency or constant off-time operation

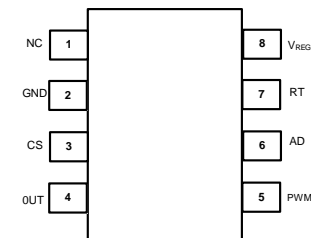
Applications

- DC/DC or AC/DC LED driver applications
- Signage and decorative LED lighting
- General lighting of flat panel displays
- RGB backlight LED driver
- General purpose constant current source

Typical Application



Package

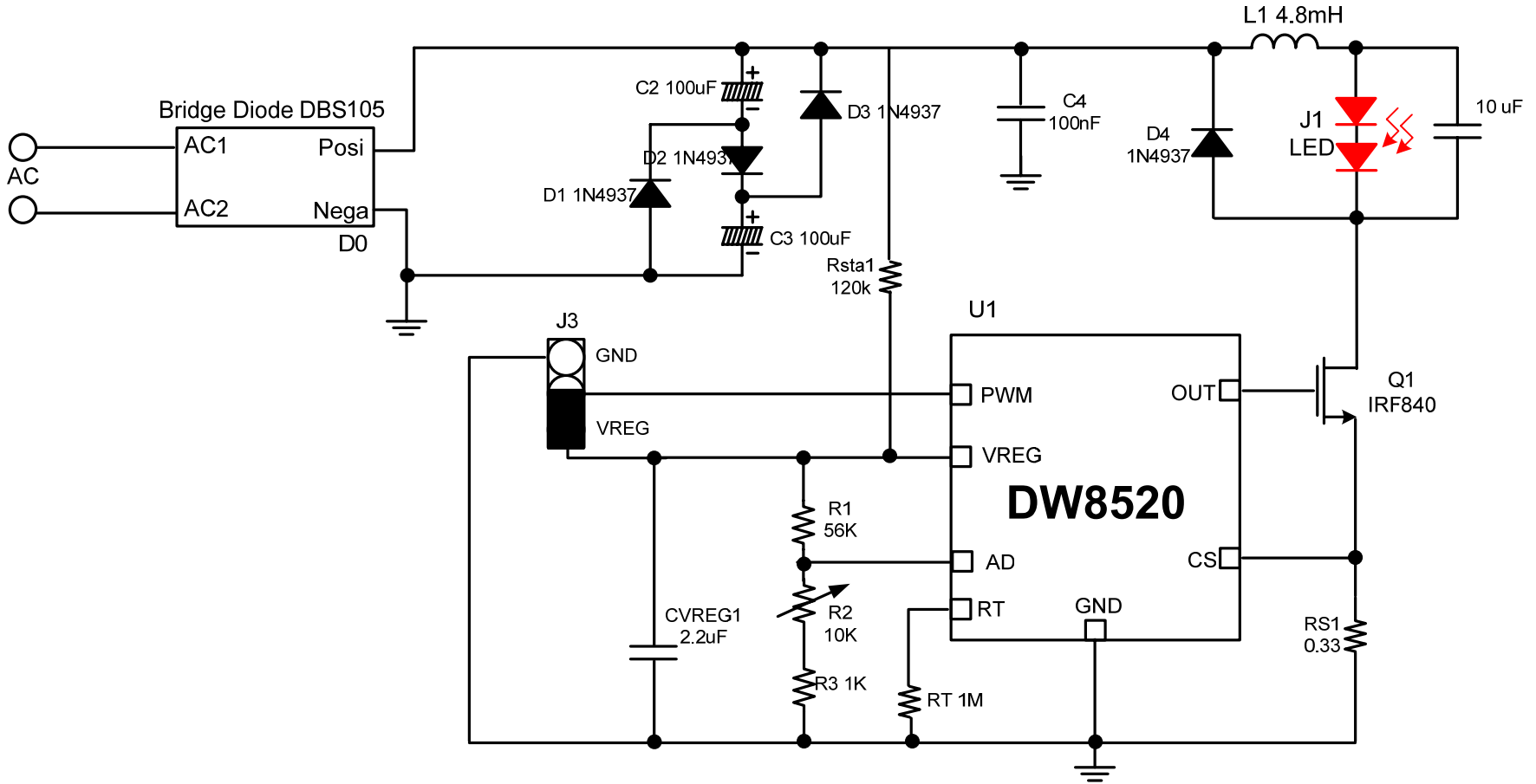


8Lead SOIC
(4.9 x 6.0 x 1.4)

Comparison Table

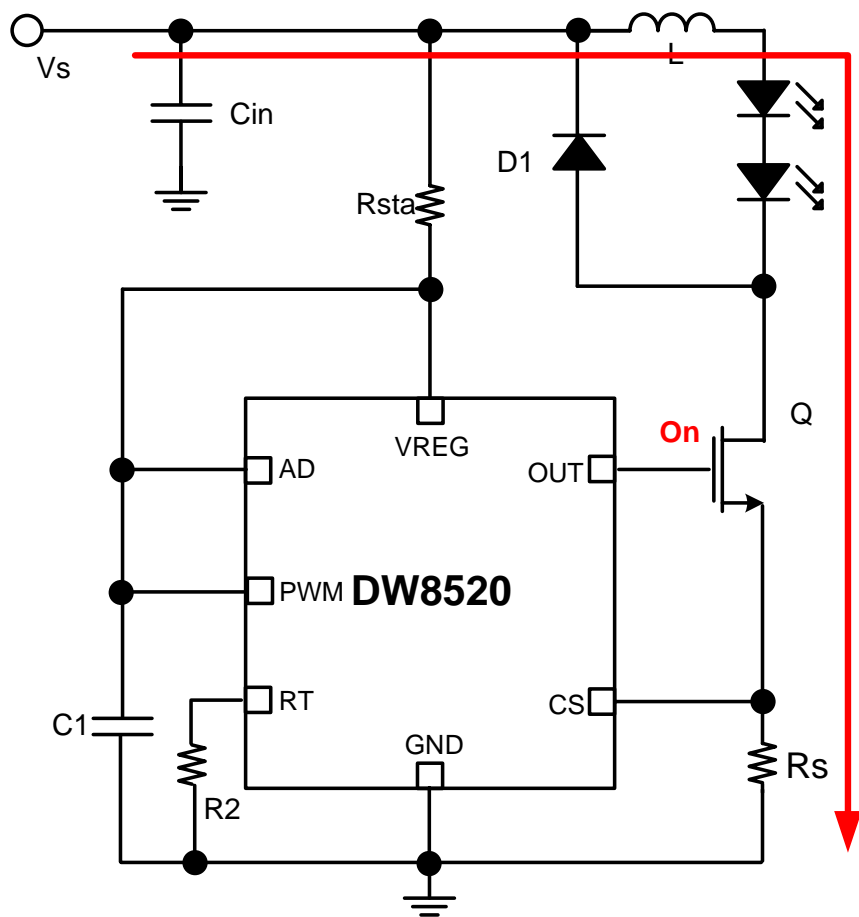
	DW8520	HV9910	Notice
Vendor	Dongwoon ANATECH	Supertex	
Package	8 SOIC(4.9x6.0mm)	8 SOIC(4.9x6.0mm)	PKG 一样
Efficiency[%]	90%	90%	同等水准
Dimming control method	PWM, Analog	PWM, Analog	同等水准
Gate threshold voltage (MOSFET GATE 驱动电压)	12V	7.5V	Gate VDS 电压低时, MOSFET Ron 电阻增高, 使得 FET 运作时 stress 增加而引起的 device ic 寿命缩短
Operating Temp. of IC	○	△	运作时, 在同样的条件下, IC内部的温度比竞争社的低
Analog Dimming Level	1.5V	0.25V	Analog Dimming Range低时, 不能进行微调, 由外部Noise可能引起错误的动作发生

Application Board circuit

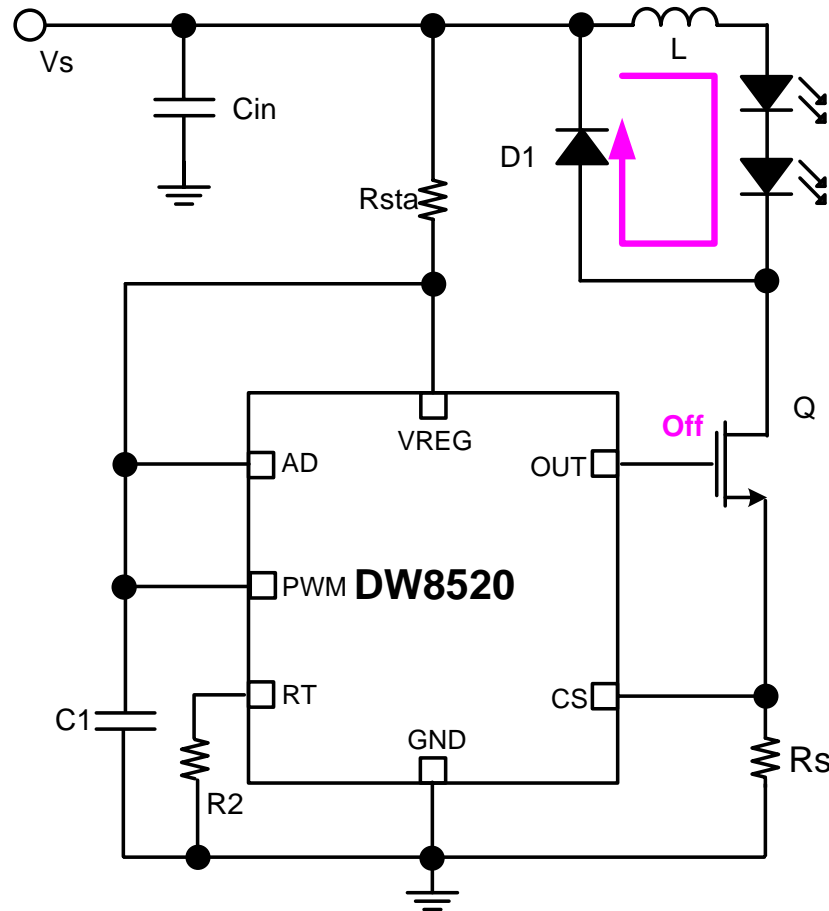


EVB circuit

运作说明

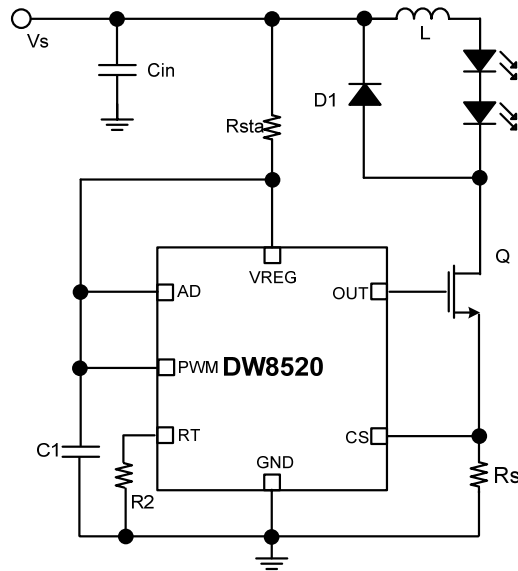


MOSFET ON



MOSFET OFF

运作说明



Pin No.	Symbol	I/O	Description
1	NC	-	No connection
2	GND	-	Ground
3	CS	I	Current sense Pin. The Maximum current is sensed by a resistor and the resulting voltage is applied to this pin
4	OUT	O	This is the output gate driver for external MOSFET
5	PWM	I	PWM Dimming control Pin, Active high operates the device, If PWM function not used the pin must connect to VREG, When open the pin, The device disable by internal pull down resistor
6	AD	I	This pin sets the analog dimming (0~1.5V)
7	RT	I	This pin sets the oscillator frequency.
8	VREG	-	This is input supply for all internal circuits

Rsta: DW8520 机动电阻

L : 能量储存的量

(FET On: Charge, FET Off : Discharge)

Q : 通过switching, 向L储存能量

Rs : 输出电流 Max.值决定

RT : 内部 Switching 周期决定

AD : Analog Dimming (0~1.5V 可变)

PWM : PWM Dimming