3.5A 高效率升压DC/DC 电压调整器

■ 器件概述

FH4204D 是一款微小型、高效率、升压型 DC/DC 调整器。电路由电流模 PWM 控制环路，误差放大器，斜坡补偿电路，比较器和功率开关等模块组成。 该芯片可在较宽负载范围内高效稳定的工作，内置一个 3.5A 的功率开关 和软启动保护电路。高达 93％的转换效率能够高效的延长电池寿命。可以通过调整两个外加电阻来设定输出电压。

■ 封装形式

- SOT-23-6L

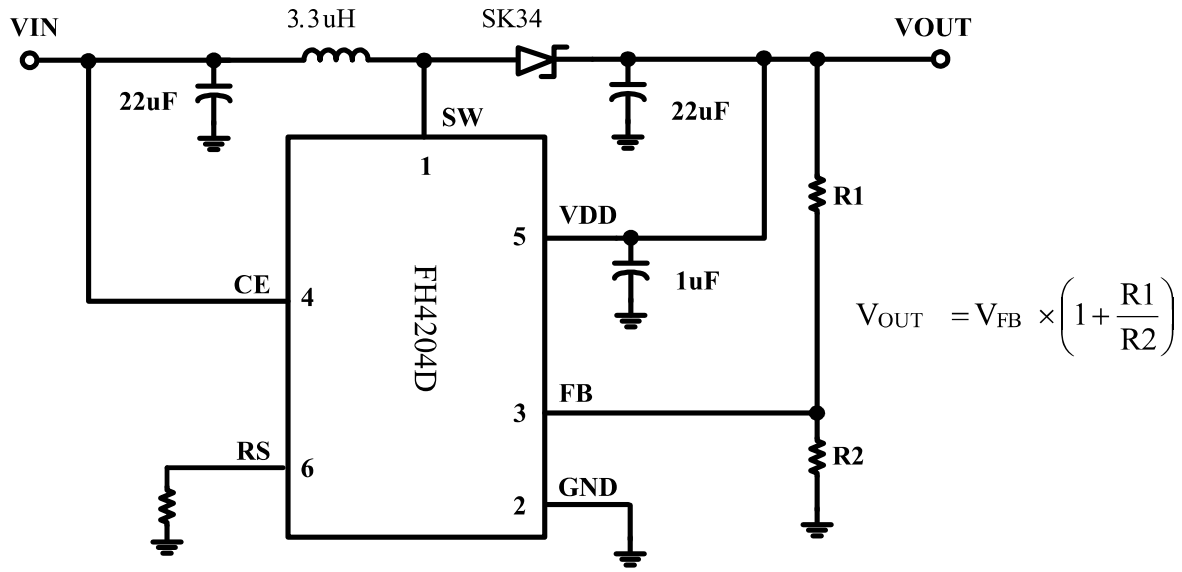
■ 产品特点

- 效率高达 93％
- 输出电压可升到 24V
- 输入电压范围 2-24V
- 1.4MHz 的固定开关频率
- 自动 PWM/PF M 切换模式
- 功率通路支持短路保护

■ 应用领域

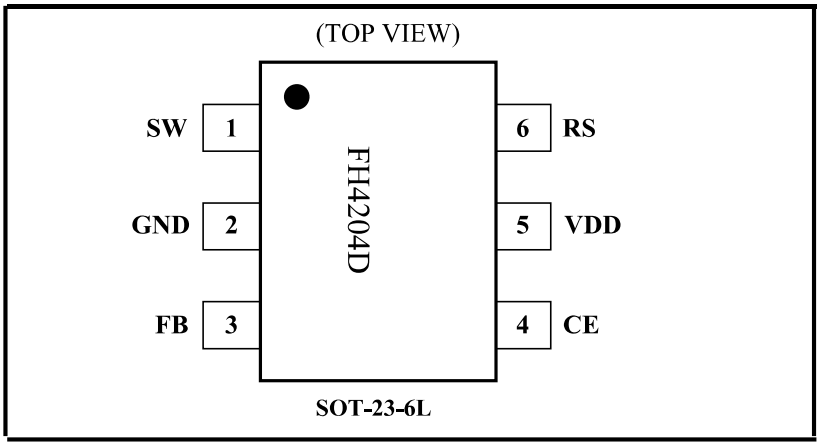
- 便携式移动设备
- 无线通信设备
- 电池后备电源

■ 典型电路



注：芯片 5 脚 VDD 端可以接 VOUT 也可以接 VIN，当 VIN<5V时，建议接 VOUT 来增强驱动能力。

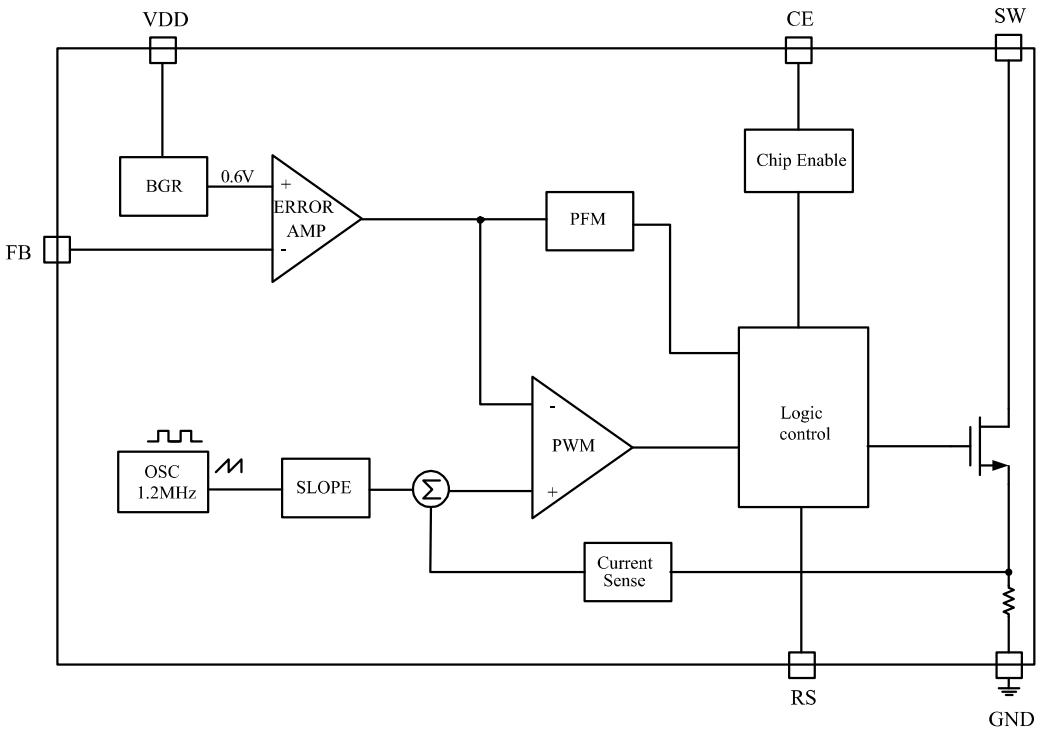
■ 引脚定义



■ 引脚说明

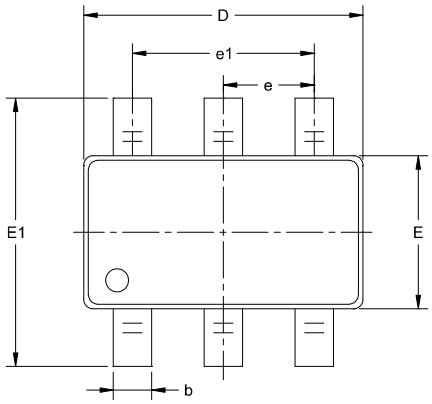
脚位顺序	引脚名称	功能描述
1	SW	开关引脚
2	GND	接地端
3	FB	反馈端
4	CE	使能端，高有效
5	VDD	输入端
6	RS	外置电阻限流端

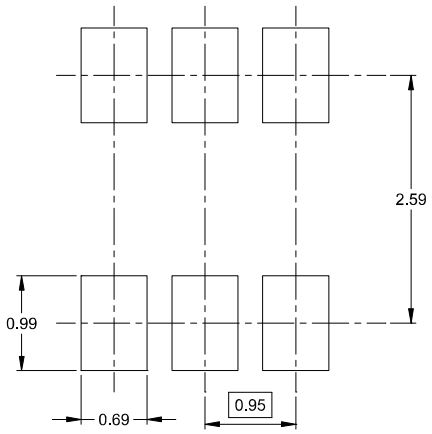
■ 功能框图



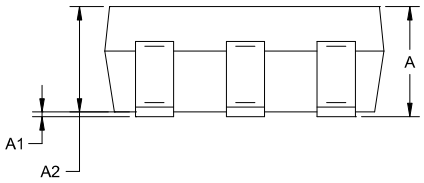
■ 封装信息

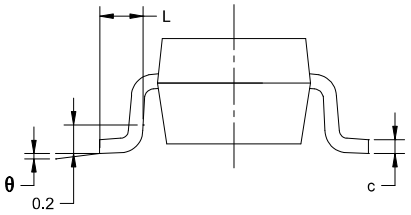
- **SOT23-6L**





RECOMMENDED LAND PATTERN(Unit: mm)





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950 BSC		0.037 BSC	
e1	1.900 BSC		0.075 BSC	
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°

■ 订购信息

Part Number	Voltage Range	Features	Operating Temperature	Package Type	Top Mark	SPQ
FH4204DM6	2.0V~24.0V	● 1.4MHz Frequency ● Efficiency: 93% ● 3.5A Peak Current ● Up to 24.0V ● VFB: 0.60V	-40℃ to 80℃	SOT-23-6L	PFR YM	3000PCS/Reel

Note:

- FH4204D devices are Pb-free and RoHs compliant.
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- If you have any other custom purchase needs, please contact our sales department.

ESD SENSITIVITY CAUTION

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

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