

电容式单键触控双输出 PWM控制 LED 调光IC

产品概述

简要数据手册

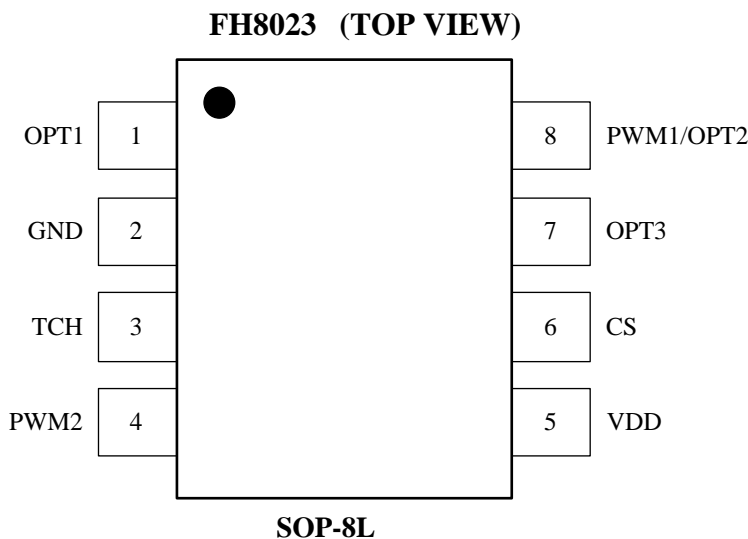
FH8023 是一款用于 LED 灯光开关控制及亮度调节的触摸 IC，支持单通道触摸输入、单路 PWM 输出，可在有介质（如玻璃、亚克力、塑料、陶瓷等）隔离保护的情况下实现触摸功能。

应用范围：触摸调光 LED 台灯、触摸调光 LED 壁灯或其他需要 PWM 输出控制的触摸式产品。

产品特点

- 工作电压：2.4~5.5V
- 灯光无频闪，亮度可根据需要随意调节，选择范围宽，操作简单方便。
- 内置稳压源、上电复位/低压复位及环境自适应算法等多种措施，可靠性非常高。
- 应用电路简单，外围器件少，加工方便，成本低。
- 抗电源干扰及手机干扰特性好，近距离、多角度手机干扰情况下触摸灵敏度及可靠性不受影响。
- HBM ESD 可以达到±4KV 以上。

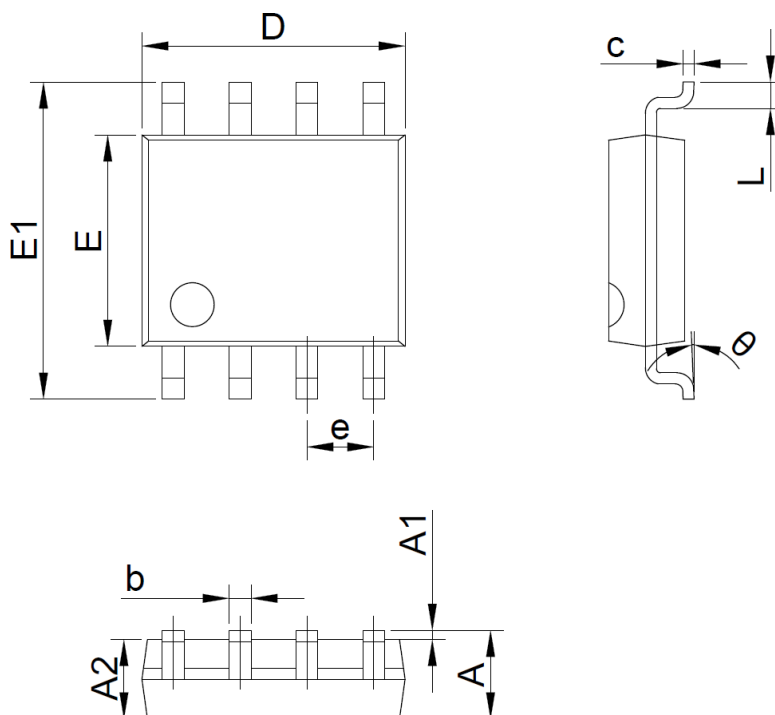
封装及引脚描述



引脚序号	引脚名称	功能描述	引脚序号	引脚名称	功能描述
1	OPT1	选项输入脚 1	5	VDD	电源正
2	GND	电源地	6	CS	采样电容
3	TCH	触摸输入脚	7	OPT3	选项输入脚 3
4	PWM2	PWM 输出脚 2	8	PWM1/ OPT2	PWM 输出脚 1 /选项输入脚 2

封装尺寸图

SOP-8 封装参考 Layout:



符号	尺寸 (mm)		
	最小值	典型值	最大值
A	1.3	1.5	1.7
A1	0.1	0.15	0.2
A2	1.3	1.4	1.5
b	0.35	0.40	0.45
c	0.1	0.15	0.2
D	4.8	4.9	5.0
E	3.8	3.9	4.0
E1	5.8	6	6.2
e	1.2	1.25	1.3
L	0.4	0.5	0.6
θ	0°	8°	13°

ORDERING INFORMATION

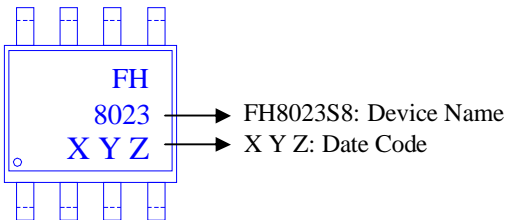
Part Number	Voltage Range	Features	Operating Temperature	Package Type	Top Mark	SPQ
FH8023S8	2.4V ~ 5.5V	<ul style="list-style-type: none"> • Single Touch Pad IC • PWM Control • Quiescent Current: 6.5uA • PWM Frequency: 31kHz 	-20°C to 70°C	SOP-8L	8023 <u>X Y Z</u>	3000PCS/Reel

Note:

- **FH8023** devices are Pb-free and RoHS compliant.
- The surface prints of our semiconductor devices are subject to change during the production process and do not involve changes in electrical parameters, and we will not separately state the notice.
- If you have any other custom purchase needs, please contact our sales department.



Device Name: SOP-8L



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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▲ Update by Sep.2020