

# 单触摸键检测IC

### ■ 器件概述

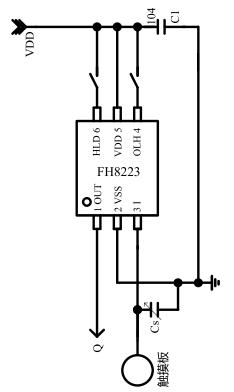
FH8223 是一款电容式单按键触摸及接近感应开关控制芯片,替代传统的机械型开关。芯片采用CMOS 工艺制造,结构简单,内置LDO性能稳定,功耗低,通过引脚可配置成多种模式,可广泛应用于TWS产品及DC类产品的触摸检测,实现产品智能化。

### ■ 应用范围

- 各种消费性产品
- 取代按钮按键



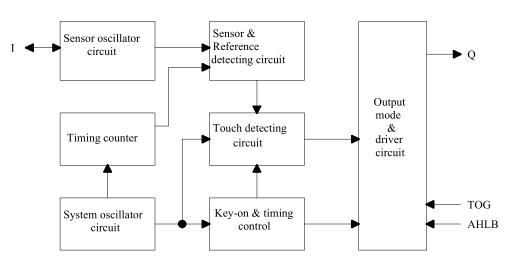
## ■ 典型应用电路



## ■ 产品特点

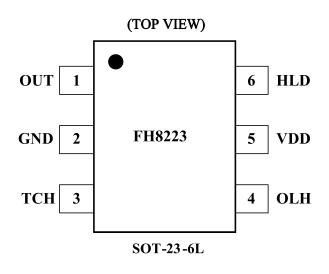
- 工作电压: 2.4V~5.5V
- 低功耗模式仅 1.5uA(在 3.0V 且无负载), 快速模式电流 4.0uA
- 快速模式响应时间 45ms,低功耗模式下最大响应时间 为 160ms
- 内置 LDO 稳压电路在电源稳定后, 0.5s 内完成上电初始化
- 灵敏度自动校准功能,工作环境发生变化可以快速校正更新
- 外部配置引脚设置为多种模式
- 触摸检测长按输出时间 10s
- 高可靠性,芯片内置去抖动电路,可有效防止外部噪声干扰而导致的误动作
- 可用于玻璃、陶瓷、塑料等介质表面

## ■ 功能模块图





## ■ 封装引脚

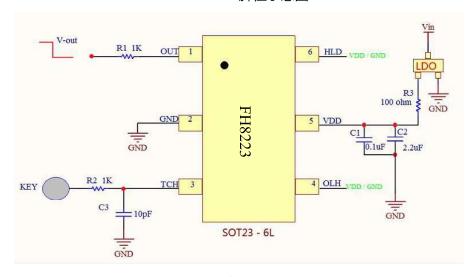


# ■ 引脚描述

NO.	名称	描述	
1	OUT	CMOS 输出	
2	GND	负电源	
3	ТСН	Touch Pad 输入	
4	OLH	输出高/低有效模式选择	
5	VDD	正电源	
6	HLD	保持/同步模式选择	

## ■ 典型应用电路原理图

### SOT-23-6L 脚位示意图:



产品设计应用时请参考相关设计说明。



## ■ 订购信息

部品编码	描述	工作温度	封装类型	器件印字	标准包装
FH8223M6	电容式 单键触摸	-20 ~ 85℃	SOT-23-6L	***	3000PCS/Reel

#### Note:

- > FH8223 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 a specific customization need, please contact our business department to communicate.







#### **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.











#### Note:

- The information described herein is subject to change without notice.
- > ForDevices Inc. is not responsible for any problems caused by circuits or diagrams described herein whose related industrial properties, patents, or other rights belong to third parties. The application circuit examples explain typical applications of the products, and do not guarantee the success of any specific mass-production design.
- Use of the information described herein for other purposes and/or reproduction or copying without the express permission of ForDevices Inc. is strictly prohibited.
- > The products described herein cannot be used as part of any device or equipment affecting the human body, such as exercise equipment, medical equipment, security systems, gas equipment, or any apparatus installed in airplanes and other vehicles, without prior written permission of ForDevices Inc.
- Although ForDevices Inc. exerts the greatest possible effort to ensure high quality and reliability, the failure or malfunction of semiconductor products may occur. The user of these products should therefore give thorough consideration to safety design, including redundancy, fire-prevention measures, and malfunction prevention, to prevent any accidents, fires, or community damage that may ensue.

> 更新于2020-12