



## 产品简介

MAX810x系列是一款具有电压检测功能的微处理器复位芯片 用于监控微控制器或其他逻辑系统的电源电压。它可以在上电掉电和节电情况下，向微控制器提供复位信号。当电源电压低于预设的检测电压时，器件会发出复位信号，直到电源电压又恢复到高于检测电压为止。

MAX810x系列芯片当输入电压低于检测电压时，V<sub>RESET</sub> 输出为高电平，应用简单，无需外部器件。

## 产品特点

低功耗：2uA（典型值）  
宽工作电压范围：1V ~ 6.0V  
具有VCC瞬态抗干扰  
无需外部元件

内置复位延时时间500ms（典型值）  
高精度复位电压值：±2.5%  
输入电压高于检测电压时，V<sub>RESET</sub>输出为低电平  
小体积封装：SOT-23

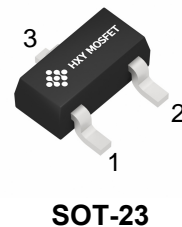
## 产品用途

电池供电设备  
无线通讯系统  
电脑、微机处理器

PAD和手持设备  
嵌入式系统

## 封装形式和管脚定义功能

管脚序号	管脚定义	功能说明
1	GND	芯片接地端
3	VCC	芯片输入端
2	RESET	复位输出端

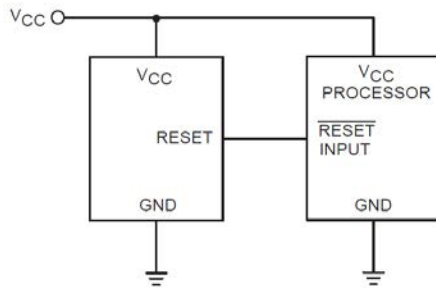


## 型号选择

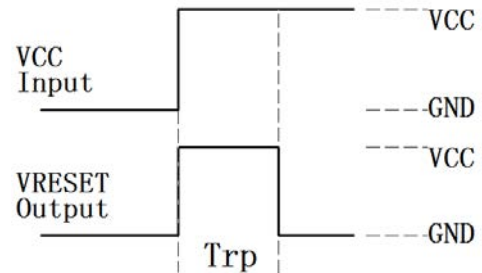
名称	型号	最高输入电压(V)	复位电压(V)	容差	封装形式
MAX810x	MAX810L	6.0	4.63	±2.5%	SOT-23
	MAX810M	6.0	4.38		
	MAX810T	6.0	3.08		
	MAX810S	6.0	2.93		
	MAX810R	6.0	2.63		
	MAX810Z	6.0	2.32		



## 应用电路



## 上电复位时间



## 极限参数

项目	符号	说明	极限值	单位
电压	V <sub>CC</sub>	输入电压	6.5	V
	V <sub>RESET</sub>	复位输出电压	-0.3~V <sub>CC</sub> +0.3	V
功耗	PD	SOT-23	200	mW
温度	T <sub>w</sub>	工作温度范围	-20~60	°C
	T <sub>c</sub>	存储温度范围	-50~125	
	T <sub>h</sub>	焊接温度	260	°C,10s

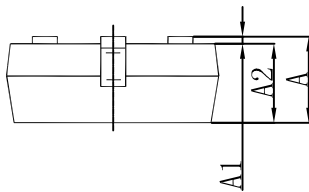
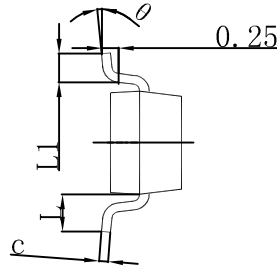
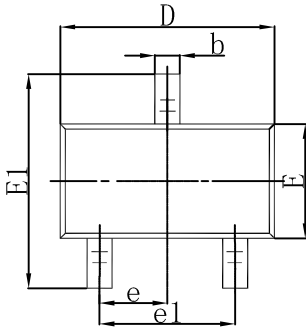
## 电学特性

T<sub>a</sub>=25°C

符号	参数	测试条件	最小	典型	最大	单位	
V <sub>CC</sub>	工作电压	-	1.0	-	6.0	V	
I <sub>CC</sub>	静态电流	V <sub>CC</sub> =5.5V, No Load	-	2	5	uA	
V <sub>th</sub>	检测电压	V <sub>th</sub>	V <sub>th</sub> *97.5%	V <sub>th</sub>	V <sub>th</sub> *102.5%	V	
T <sub>rd</sub>	复位上升沿时间	V <sub>CC</sub> =V <sub>th</sub> to (V <sub>th</sub> -100mV)	-	90	-	ns	
T <sub>rp</sub>	上电复位时间	MAX810Z/R/S/T, V <sub>CC</sub> =0 to 3.5V	V <sub>RESET</sub> = HtoL, No Load	85	500	900	ms
		MAX10M/L, V <sub>CC</sub> =0 to 5.0V					
V <sub>OL</sub>	复位输出低电压	V <sub>CC</sub> =V <sub>th</sub> max, I <sub>SINK</sub> =1.2mA	-	-	0.3	V	
V <sub>OH</sub>	复位输出高电压	1.8V<V <sub>CC</sub> <V <sub>th</sub> min, I <sub>SOURCE</sub> =150uA	0.8V <sub>CC</sub>	-	-	V	
V <sub>th</sub> / (V <sub>th</sub> * Ta)	温度系数	-20°C≤T <sub>a</sub> ≤60°C	-	±200	-	ppm/°C	



封装信息  
SOT-23



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°



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