



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_{RESET} 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_{RESET}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

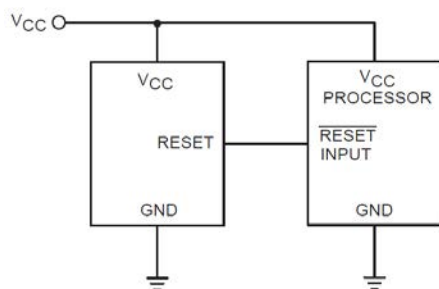


型号选择

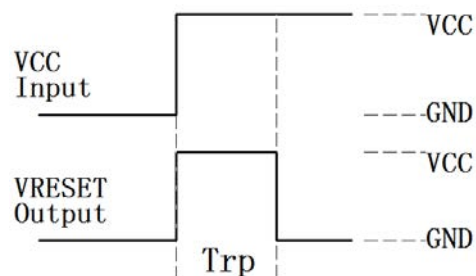
名称	型号	最高输入电压(V)	复位电压(V)	容差	封装形式
MAX810x	MAX810L	6.0	4.63	±2.5%	SOT-23
	MAX810M	6.0	4.38		
	MAX810T	6.0	3.08		
	MAX810S	6.0	2.93		
	MAX810R	6.0	2.63		
	MAX810Z	6.0	2.32		



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 _{CC}	输入电压	6.5	V
	V _{RESET}	复位输出电压	-0.3~V _{CC} +0.3	V
功耗	PD	SOT-23	200	mW
温度	T _w	工作温度范围	-20—60	°C
	T _c	存储温度范围	-50—125	
	T _h	焊接温度	260	°C,10s

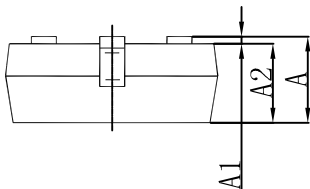
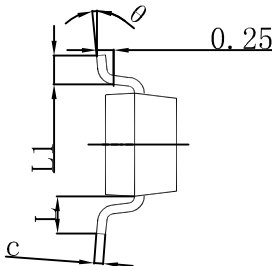
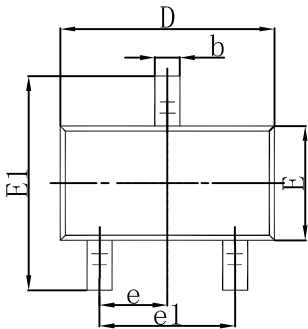
电学特性

T_a=25°C

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