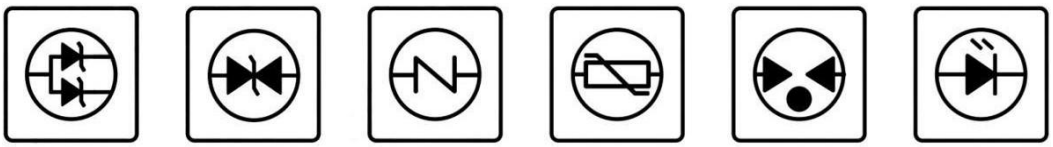
MSKSEMI 美森科
SEMICONDUCTOR



MAX810

Product specification

产品简介

MAX810 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。

MAX810 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。

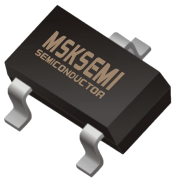
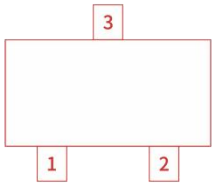
产品特点

- 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，VRESET 输出为低电平
- 小体积封装：SOT-23-3

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

封装形式	管脚定义
	
SOT-23-3	

管脚序号 SOT23	管脚定义	功能说明
1	GND	芯片接地端
3	VCC	芯片输入端
2	RESET	芯片输出端

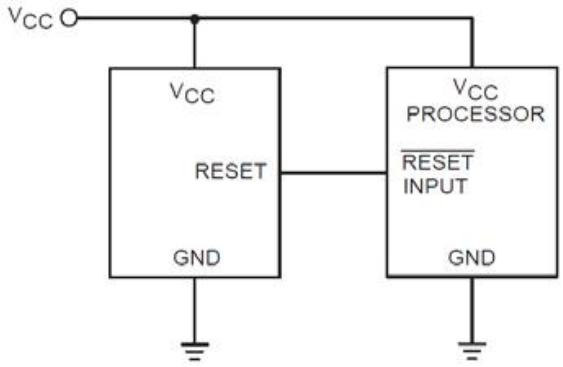
型号和丝印详情

名称	型号	最高输入电压(V)	复位电压(V)	容差	封装形式
MAX810** **=VTH	MAX810L	6.0	4.63	±2.5%	SOT-23-3
	MAX810M	6.0	4.38	±2.5%	
	MAX810T	6.0	3.08	±2.5%	
	MAX810S	6.0	2.93	±2.5%	
	MAX810R	6.0	2.63	±2.5%	

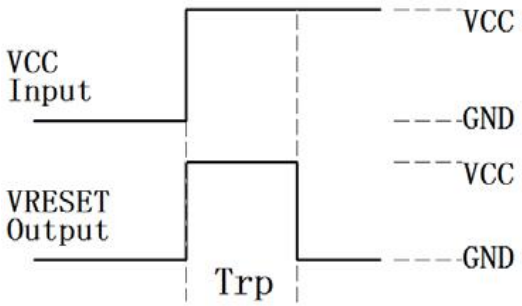
MAX810L	MAX810M	MAX810T
AGAA	AHAA	AJAA

MAX810S	MAX810R
AKAA	ALAA

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-23-3	200	mW
温度	Tw	工作温度范围	-20—60	℃
	Tc	存储温度范围	-50—125	
	Th	焊接温度	260，10s	℃

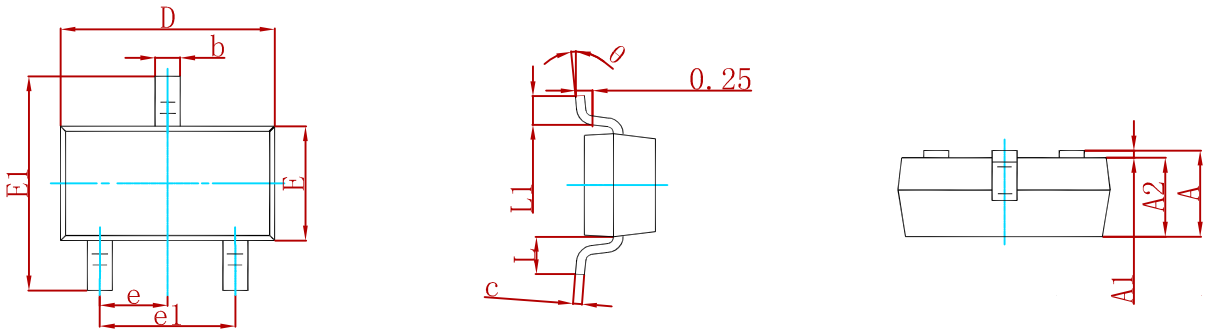
注：极限参数是指无论在任何条件下都不能超过的极限值。万一超过此极限值，将有可能造成产品劣化等物理性损伤； 同时在接近极限参数下，不能保证芯片可以正常工作。

电学特性

MAX810 Ta=25℃

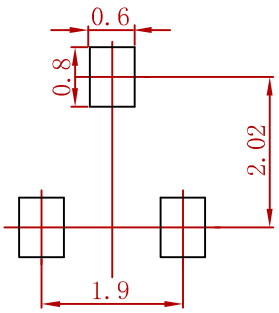
符号	参数	测试条件		最小	典型	最大	单位
V_{CC}	工作电压	-		1.0	-	6.0	V
I_{CC}	静态电流	VCC=5.5V,No Load		-	2	5	uA
V_{th}	检测电压	V_{th}		V_{th}*97.5%	V_{th}	V_{th}*102.5%	V
T_{rd}	复位上升沿时间	VCC=Vth to (Vth－100mV)		-	90	-	ns
T_{rp}	上电复位时间	MAX10Z/R/S/T, V_{CC}=0 to 3.5V	V_{RESET} = H to L, No Load	85	500	900	ms
		MAX10M/L, V_{CC}=0 to 5.0V					
V_{OL}	复位输出低电压	V_{CC} = Vthmax，I_{SINK}=1.2mA		-	-	0.3	V
V_{OH}	复位输出高电压	1.8V＜V_{CC}＜Vthmin，I_{SOURCE}=150uA		0.8V_{CC}	-	-	V
$\Delta V_{th}/(V_{th}*\Delta Ta)$	温度系数	-20℃≤Ta≤60℃		-	± 200	-	ppm/℃

封装信息



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°

焊盘布局建议



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

订单信息

P/N	PKG	QTY
MAX810	SOT-23-3	3000

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