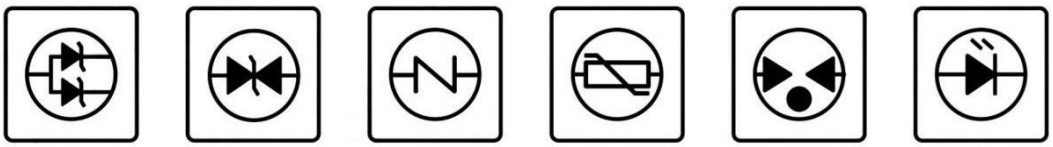
MSKSEMI 美森科
SEMICONDUCTOR



MAX809

产品手册

产品简介

MAX809 系列是一款采用数字系统电路设计技术实现的三端口低电压复位检测监控器，可以对主机处理器 提供一个复位监控信号。该系列复位检测监控器能监控 1.0V～5.0V 的固定电压，应用简单，无需外部器件。

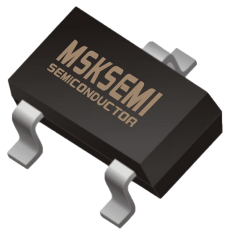
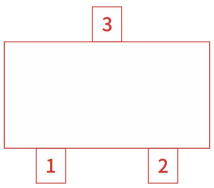
产品特点

- 低功耗：5.5uA，@VCC=6V（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 200ms（典型值）
- 高精度复位电压值： ±2.5%
- 小体积封装： SOT-23-3

产品用途

- 电池供电设备
- 掉电检测器
- 电脑、微机处理器
- 非易失性 RAM 信号存储保护器
- 临界 MP 电源监控
- 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	

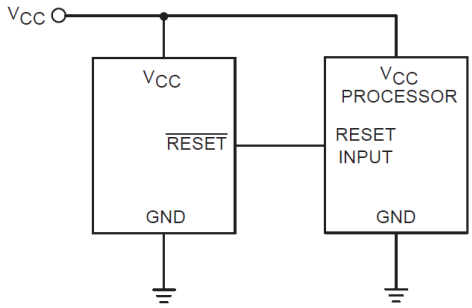
管脚序号 SOT-23-3	管脚定义	功能说明
1	GND	芯片接地端
3	VCC	芯片输入端
2	$\overline{\text{RESET}}$	复位输出端

型号和丝印详情

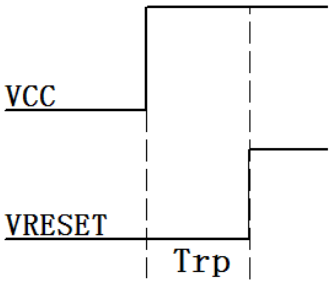
名称	型号	最高输入电压VCC(V)	复位电压Vth(R) (V)	容差	封装形式
MAX809* (*=VTH)	MAX 809L	6.0	4.63	±2.5%	SOT-23-3
	MAX 809M	6.0	4.38	±2.5%	
	MAX 809J	6.0	4.00	±2.5%	
	MAX 809T	6.0	3.08	±2.5%	
	MAX 809S	6.0	2.93	±2.5%	
	MAX 809R	6.0	2.63	±2.5%	

MAX809L	MAX809M	MAX809J
AAAA	ABAA	CWAA
MAX809T	**MAX809S**	**MAX809R**
ACAA	ADAA	AFAA

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	SOT23-3	200	mW
温度	Tw	工作温度范围	-50～95	℃
	Tc	存储温度范围	-55～125	
	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。如果超过此极限值，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。

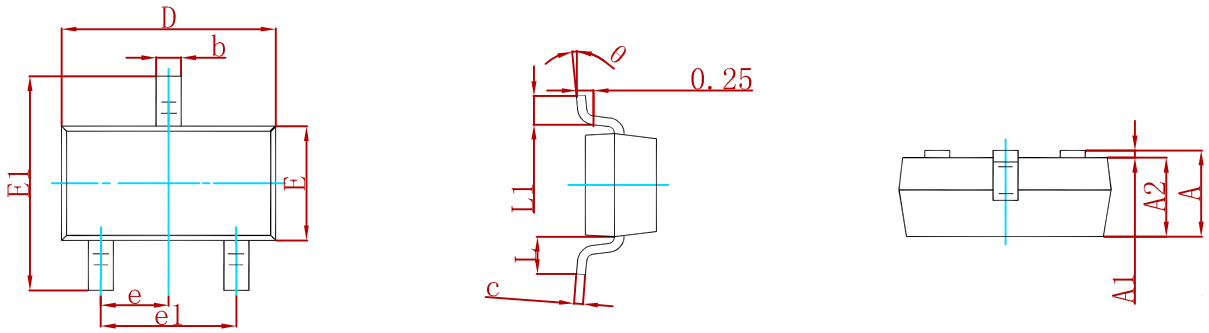
电学特性

MAX809　　（Ta=25℃，除非特殊说明）

符号	项目	测试条件		最小值	典型值	最大值	单位
VCC	工作电压			1.0	-	6.0	V
ICC	静态电流	VCC=6V,No Load		-	5.5	-	uA
Vth (1)	复位电压	VCC=Vth+0.5V to Vth，空载，V_{RESET} =VCC to GND		0.975* $Vth_{(E)}$	-	1.025* $Vth_{(E)}$	V
Trd	下降沿时间	VCC= Vth to (Vth－100mV)		-	5	-	us
Trp	上电复位时间	R/S/T	VCC=0 to 3.5V，空载	80	-	350	ms
		L/M/J	VCC=0 to 5V，空载	80	-	350	ms
VOL	复位输出低电压	VCC=Vth_{min}，I_{SINK}=1.2mA		-	-	0.3	V
VOH	复位输出高电压	VCC>Vth_{max}，I_{SOURCE}=500uA		0.8V_{CC}	-	-	V
ΔVth/(Vth*ΔTa)	温度系数	-40℃≤Ta≤85℃		-	±150	-	ppm/℃

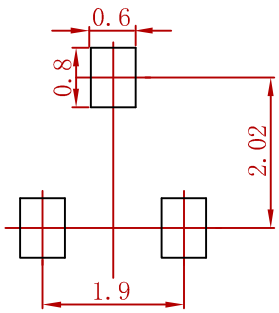
注：（1）、Vth 为实际电压值，$Vth_{(E)}$为标称值。

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.

订购信息

P/N	PKG	QTY
MAX809	SOT-23-3	3000

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