

描述 / Descriptions

SOT23-6 塑封封装低电容 TVS 二极管。

Low Capacitance TVS Array in a SOT23-6 Plastic Package.

特征 / Features

4 路 ESD 保护结构；低电容的高速接口；I/O 通道之间的电容不大于 0.35pF；低钳位电压；低工作电压；适应高速数据传输线。无卤产品。

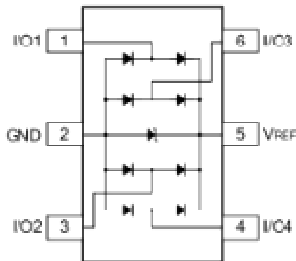
4 ESD protection structures, low capacitance for high-speed interfaces, Capacitance I / O channel is not more than 0.35pF, Low clamping voltage, Low operating voltage, suitable for high speed data transmission lines. HF Product.

用途 / Applications

用于高速数据线 ESD 保护，如 USB 2.0、机顶盒、显示器等。按 IEC 61000-4-2(ESD)标准：±17V (空气放电)，±12 (接触放电)。

ESD protection for high-speed data lines, such as USB 2.0, set-top boxes, monitors and so on.

According to IEC 61000-4-2 (ESD) Standard: ± 17V (air discharge), ± 12 (contact discharge).

内部等效电路 / Equivalent Circuit**引脚排列 / Pinning****印章代码 / Marking**

见印章说明。 See Marking Instructions.

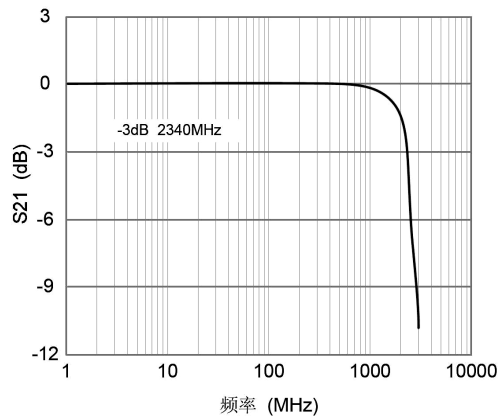
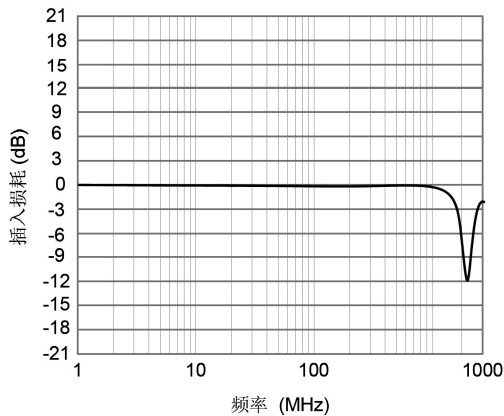
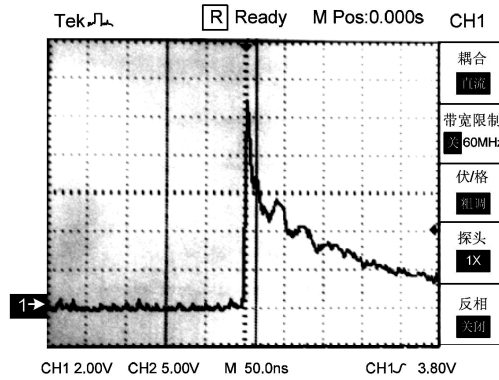
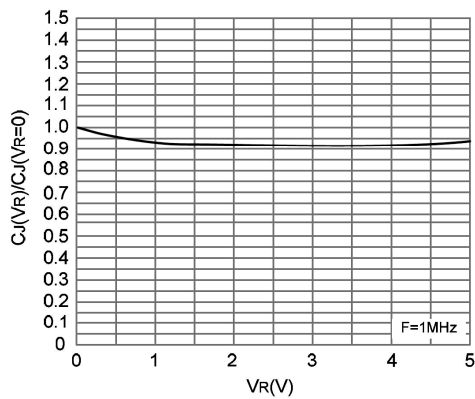
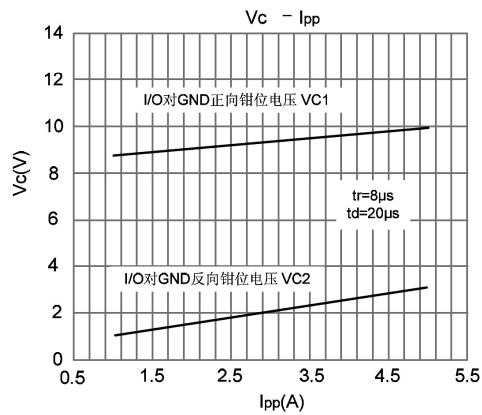
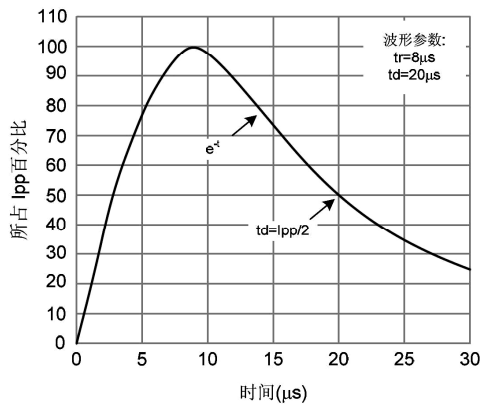
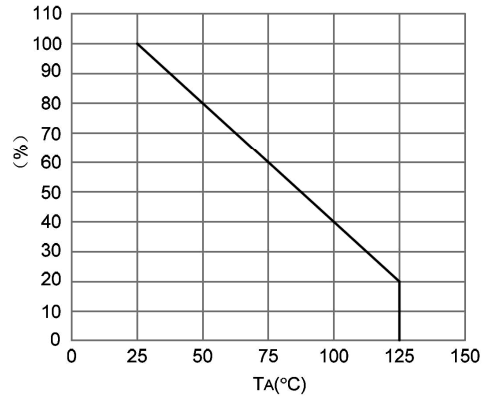
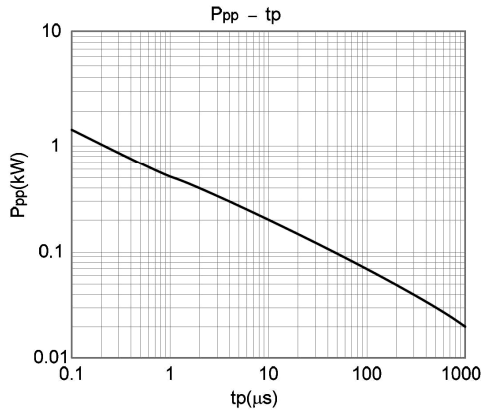
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Pulse Power (tp = 8/20μs)	P _{PP}	150	W
Peak Pulse Current (tp = 8/20μs)	I _{PP}	5.0	A
ESD per IEC 61000-4-2 (Air)	V _{ESD1}	±17	kV
ESD per IEC 61000-4-2 (Contact)	V _{ESD2}	±12	kV
Operating Temperature	T _{OPR}	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150	°C

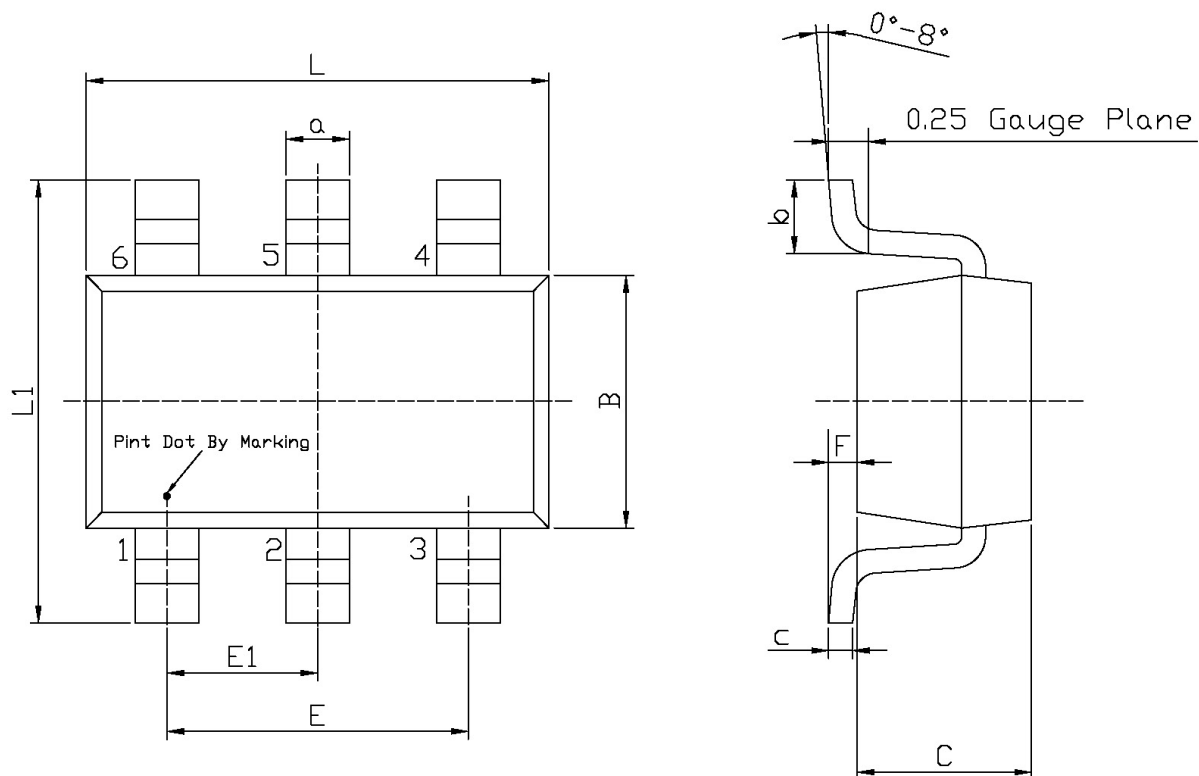
电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Reverse Stand-Off Voltage	V _{RWM}	I _t =1mA			5.0	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	6.0			V
Reverse Leakage Current	I _R	V _{RWM} =5V T=25°C			1.0	μA
Clamping Voltage	V _{C1}	I _{PP} =1.0A t _p =8/20μS		8.5	12	V
	V _{C2}			1.8		V
Capacitance. Any I/O pin to I/O	C _{J1}	V _R =0V f=1MHz		0.35	0.45	pF
Capacitance. Any I/O pin to GND	C _{J2}				0.9	pF

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

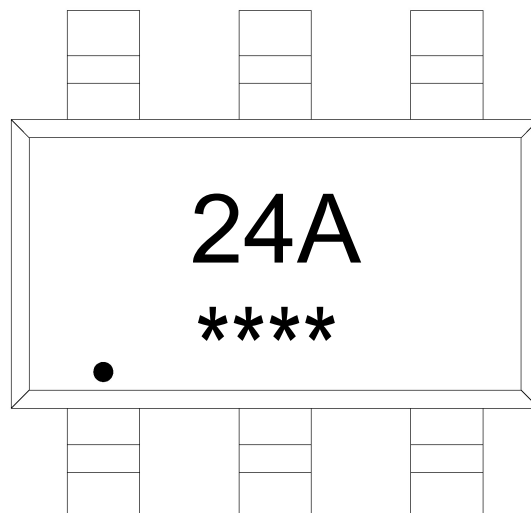


Unit: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.82	3.02	E1	0.85	1.05
B	1.50	1.70	a	0.35	0.50
C	0.90	1.30	c	0.10	0.20
L1	2.60	3.00	b	0.35	0.55
E	1.80	2.00	F	0	0.15

SOT23-6

印章说明 / Marking Instructions



说明：

24A： 为型号代码

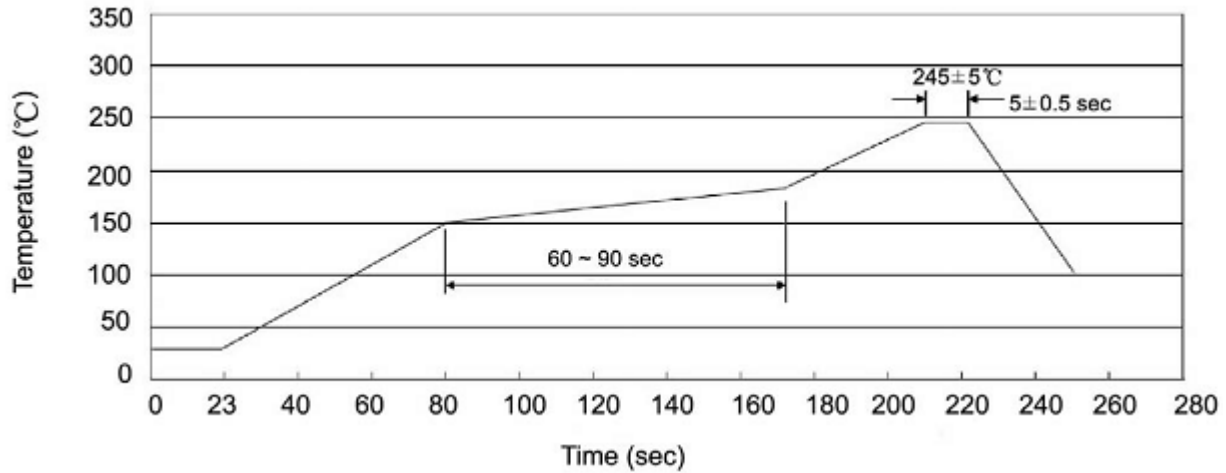
****： 为生产批号代码，随生产批号变化.

Note:

24A: Product Type Code

****: Lot No. Code, code change with Lot No.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT23-5/6	3,000	10	30,000	4	120,000	7" ×8	210×205×205	445×230×435

使用说明 / Notices