

/ Revised record

F	2016-3				
G	2019-10-18	1			
H	2019-12-4	2	C_{J1} C_{J2}		
I	2022-6-13	1	$\pm 17 \text{ V}$ (), ± 12 () $\pm 17 \text{ kV}$ (), $\pm 12 \text{ kV}$ ()		

/ Descriptions

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

/ Features

4 ESD I/O 0.35pF

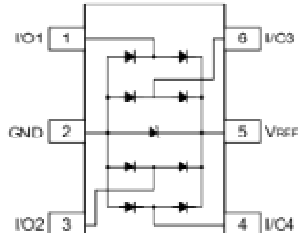
4 ESD protection structures, low capacitance for high-speed interfaces, Capacitance I / O channel is not more than 0.35pF, Low clamping voltage, Low operating voltage, suitable for high speed data transmission lines. HF Product.

/ Applications

ESD USB 2.0 IEC 61000-4-2(ESD) $\pm 17KV$ ($\pm 12KV$)

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: $\pm 17KV$ (air discharge), $\pm 12KV$ (contact discharge).

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

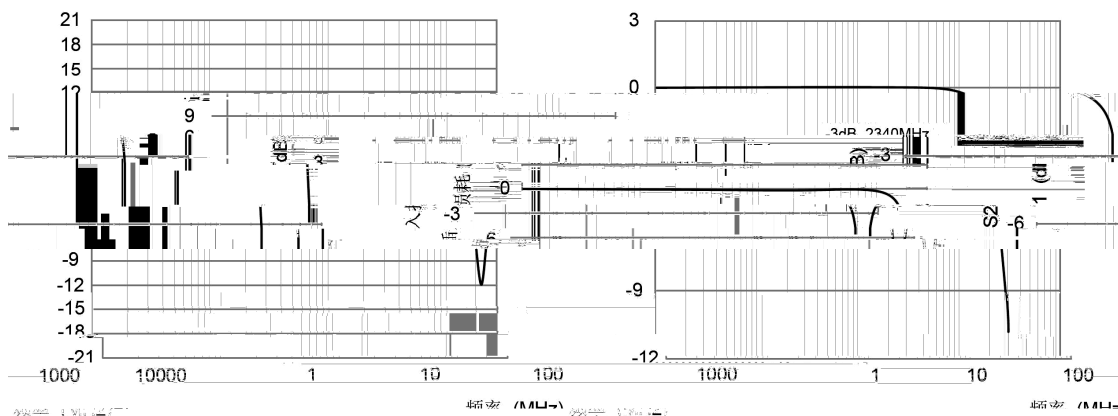
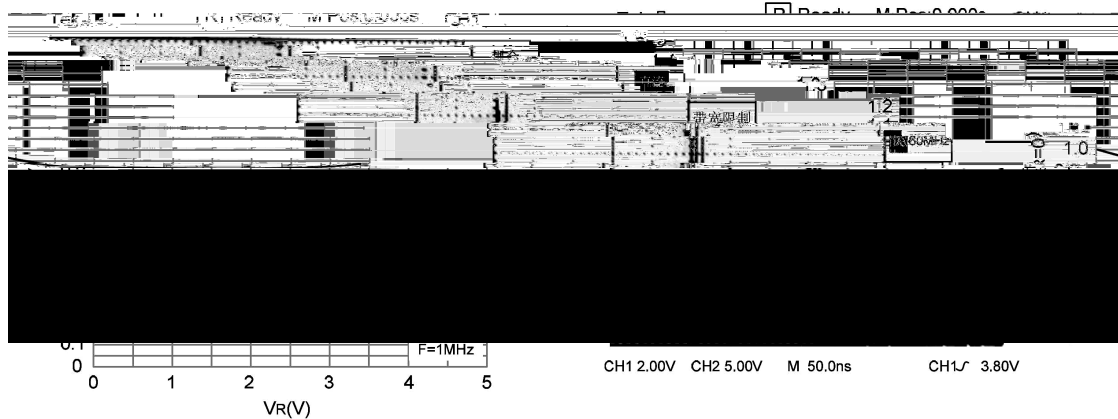
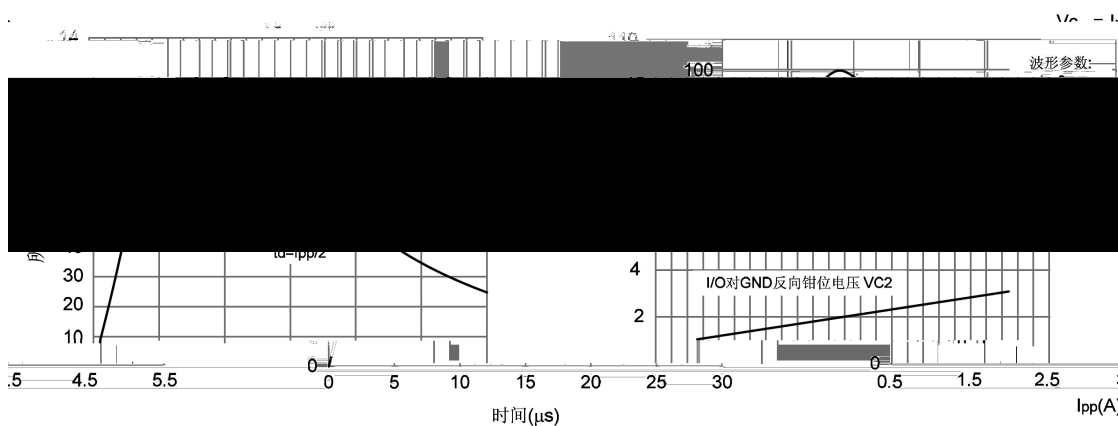
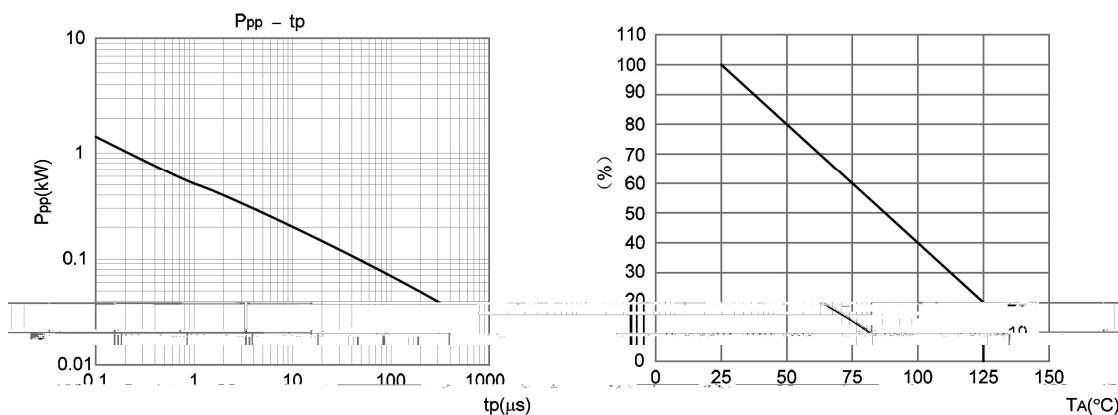
Parameter	Symbol	Rating	Unit
Peak Pulse Power (tp = 8/20μs)	P _{PP}	150	W
Peak Pulse Current (tp = 8/20μs)	I _{PP}	5.0	A
ESD per IEC 61000-4-2 (Air)	V _{ESD1}	±17	kV
ESD per IEC 61000-4-2 (Contact)	V _{ESD2}	±12	kV
Operating Temperature	T _{OPR}	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150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

/ Electrical Characteristics(Ta=25)

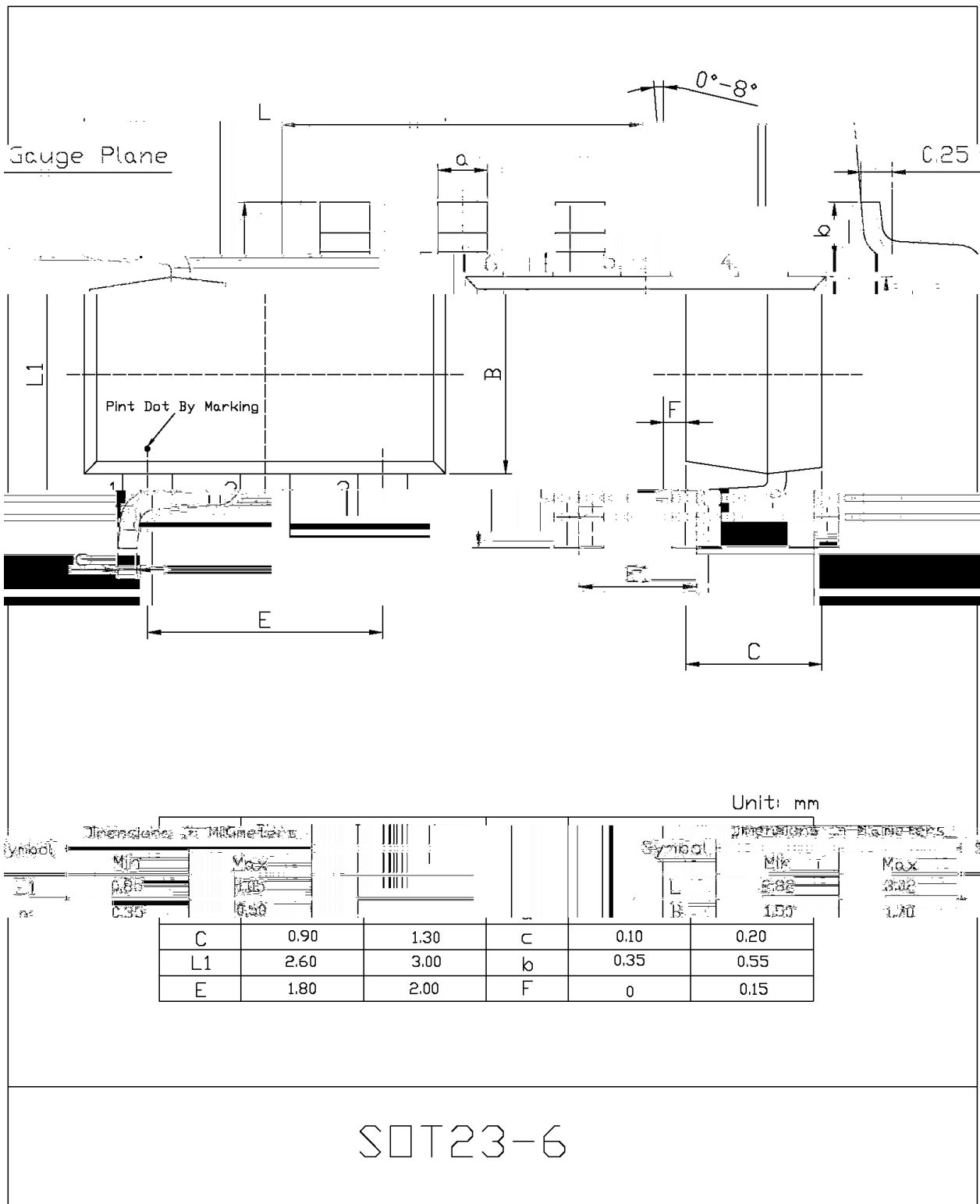
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V _{RWM}	I _t =1mA			5.0	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	6.0			V
Reverse Leakage Current	I _R	V _{RWM} =5V T=25°C			1.0	μA
Clamping Voltage	V _{C1}	I _{PP} =1.0A t _p =8/20μS		8.5	12	V
	V _{C2}			1.8		V
Capacitance. 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



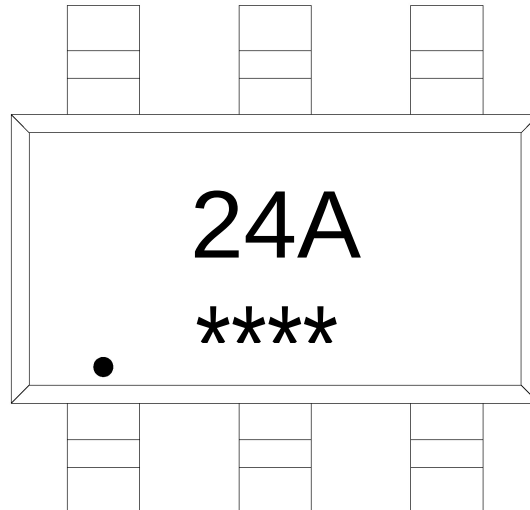
I Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



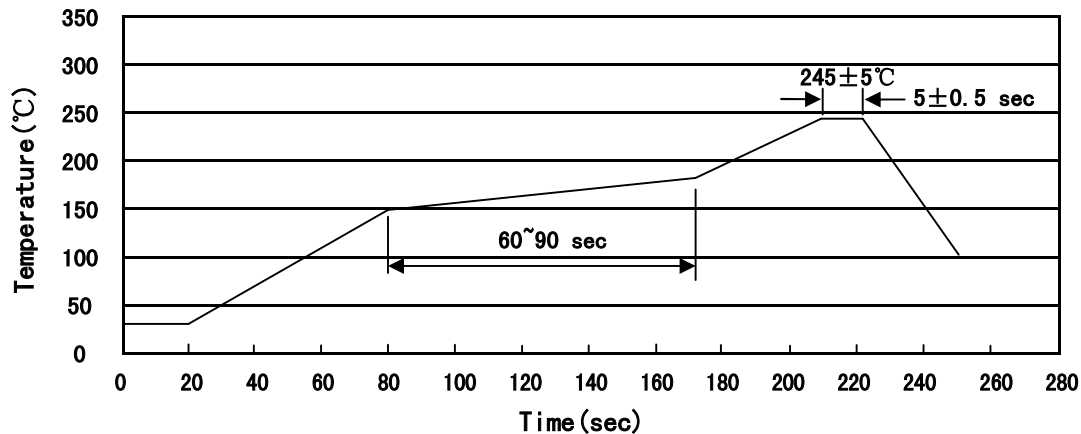
24A

Note:

24A: Product Type Code

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

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|----|-----------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | | | 2 | 10°C/sec. | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

260±5°C 10±1 sec. Temp.:260±5°C Time:10±1 sec

/ Packaging SPEC.

/ 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

/ Notices