

/ Revised record

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

/ Descriptions

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

/ Features

4 ESD I/O 0.35pF

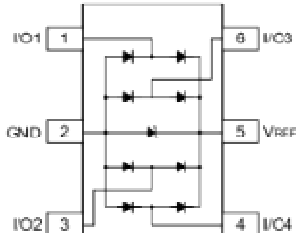
4 ESD protection structures, low capacitance for high-speed interfaces, Capacitance I / O channel is not more than 0.35pF, Low clamping voltage, Low operating voltage, suitable for high speed data transmission lines. HF Product.

/ Applications

ESD USB 2.0 IEC 61000-4-2(ESD) ± 17KV (), ± 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: ± 17KV (air discharge), ± 12KV (contact discharge).

/ Equivalent Circuit

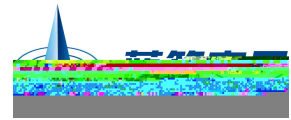


/ Pinning



/ Marking

See Marking Instructions.

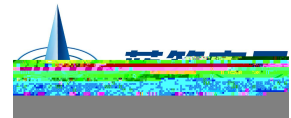


/ Absolute Maximum Ratings(Ta=25)

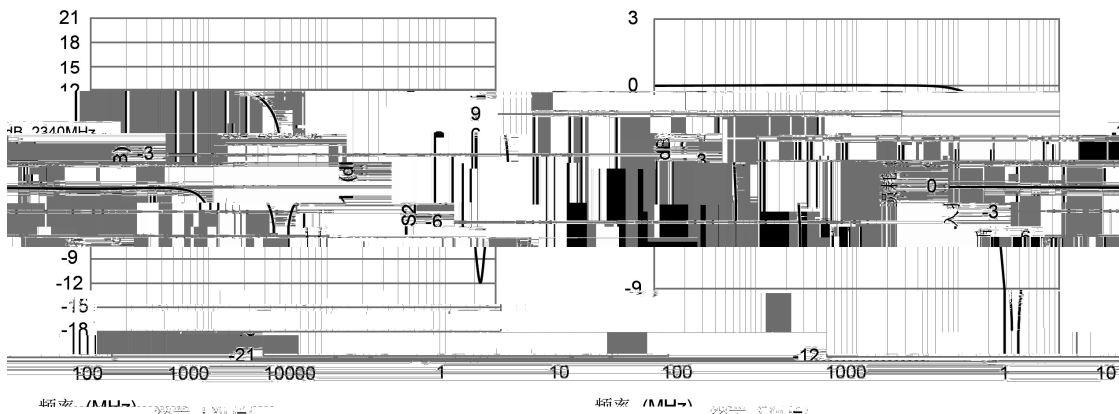
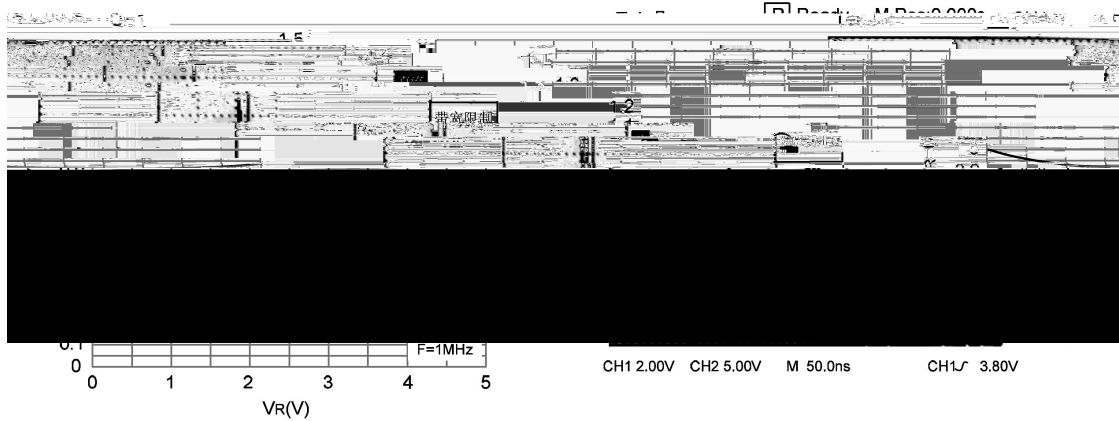
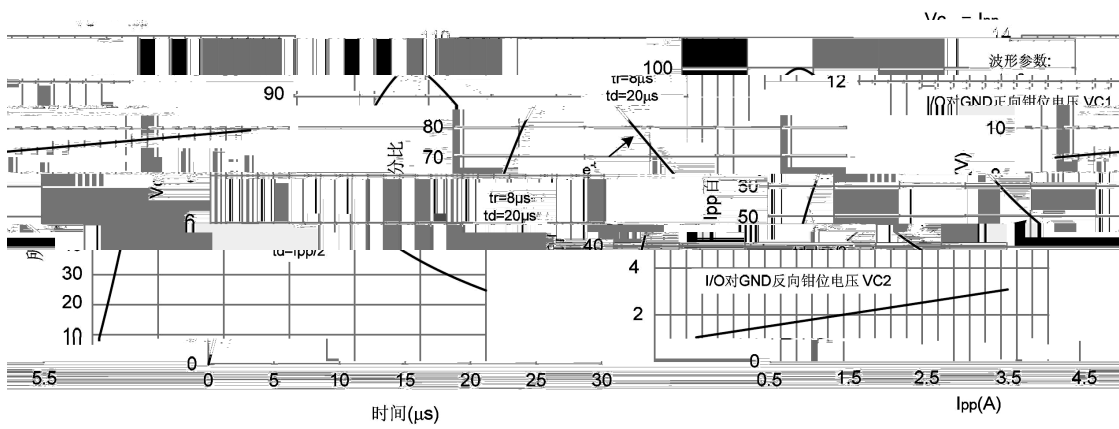
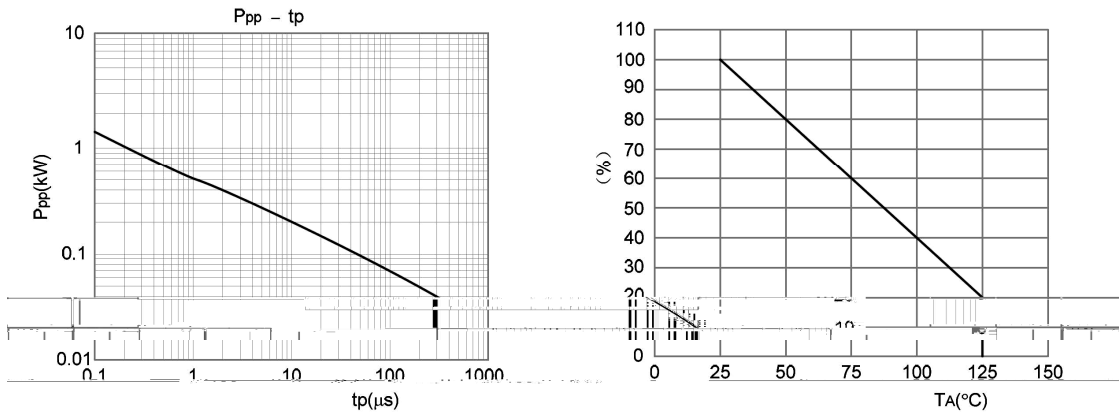
Parameter	Symbol	Rating	Unit
Peak Pulse Power (tp = 8/20μs)	P _{PP}	150	W
Peak Pulse Current (tp = 8/20μs)	I _{PP}	5.0	A
ESD per IEC 61000-4-2 (Air)	V _{ESD1}	±17	kV
ESD per IEC 61000-4-2 (Contact)	V _{ESD2}	±12	kV
Operating Temperature	T _{OPR}	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150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

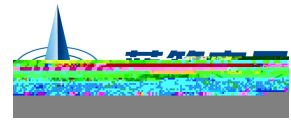
/ Electrical Characteristics(Ta=25)

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

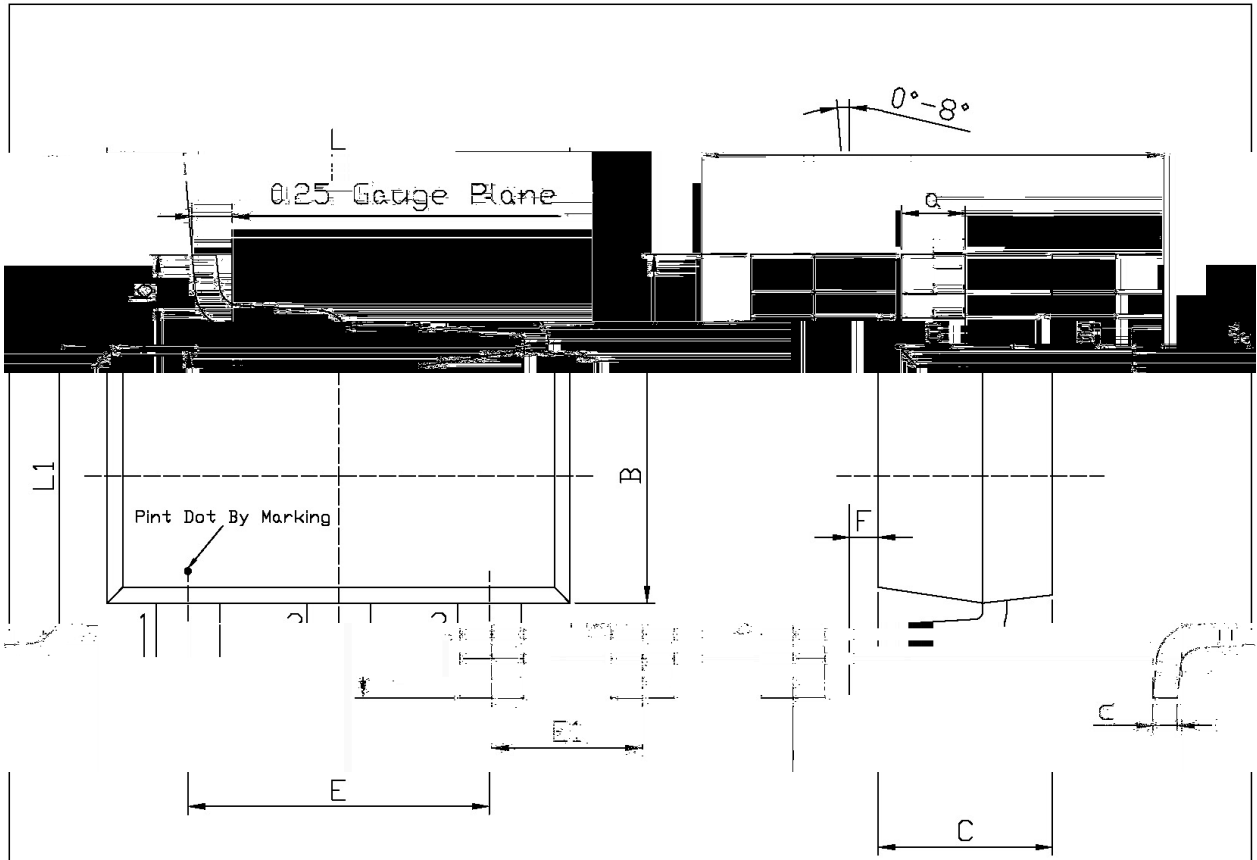


/ Electrical Characteristic Curve





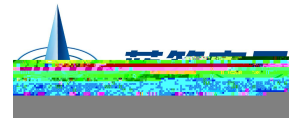
/ Package Dimensions



Unit: mm

Symbol	Dimension in Micrometers		Symbol	Dimension in Micrometers	
	Min	Max		Min	Max
L1	0.80	1.00	L	0.30	0.50
B	0.35	0.50	B	1.50	1.70
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



/ Marking Instructions

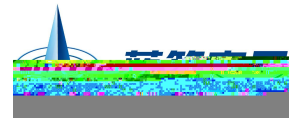


24A

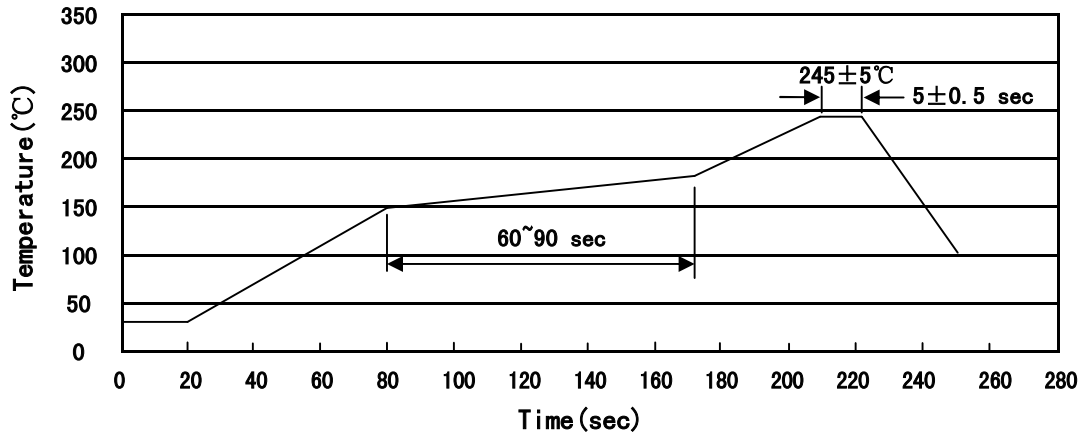
Note:

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" x8	210×205×205	445×230×435

/ Notices