

**/ Revised record**

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



TVS  
array in a SOT23-6 Plastic Package.

I/O

0.35pF

res, low capacitance for high-speed interfaces, Capacitance I / O channel is  
low clamping voltage, Low operating voltage, suitable for high speed data  
product.

USB 2.0

IEC 61000-4-2(ESD)

 $\pm 17\text{KV}$  (

)

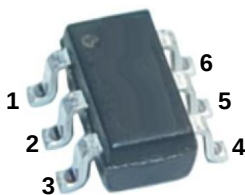
speed data lines, such as USB 2.0, set-top boxes, monitors and so on.

4-2 (ESD) Standard:  $\pm 17\text{KV}$  (air discharge),  $\pm 12\text{KV}$  (contact discharge).

valent Circuit

102 3 4 104

## / Pinning



## / Marking

See Marking Instructions.

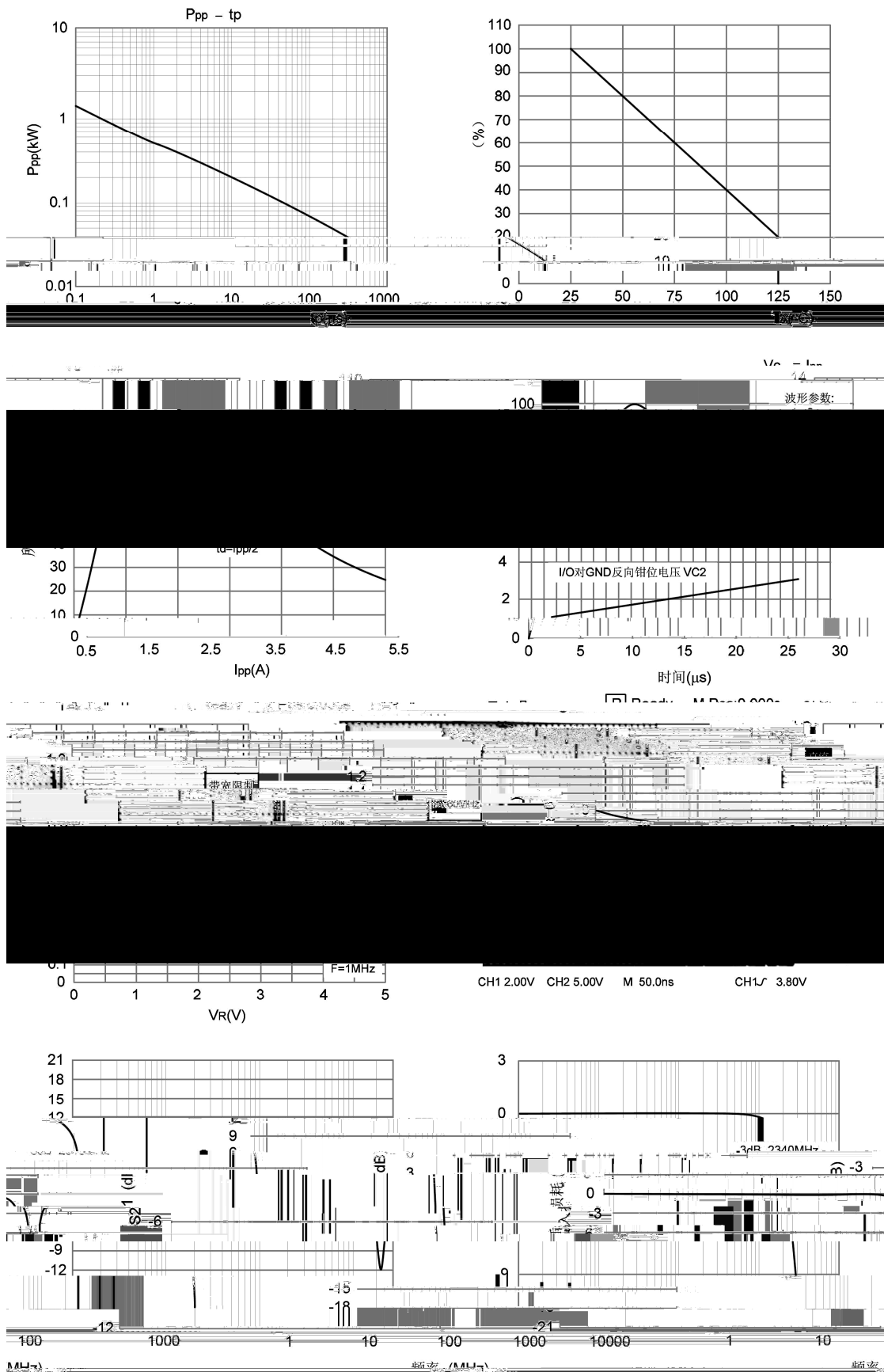
**/ Absolute Maximum Ratings(Ta=25 )**

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

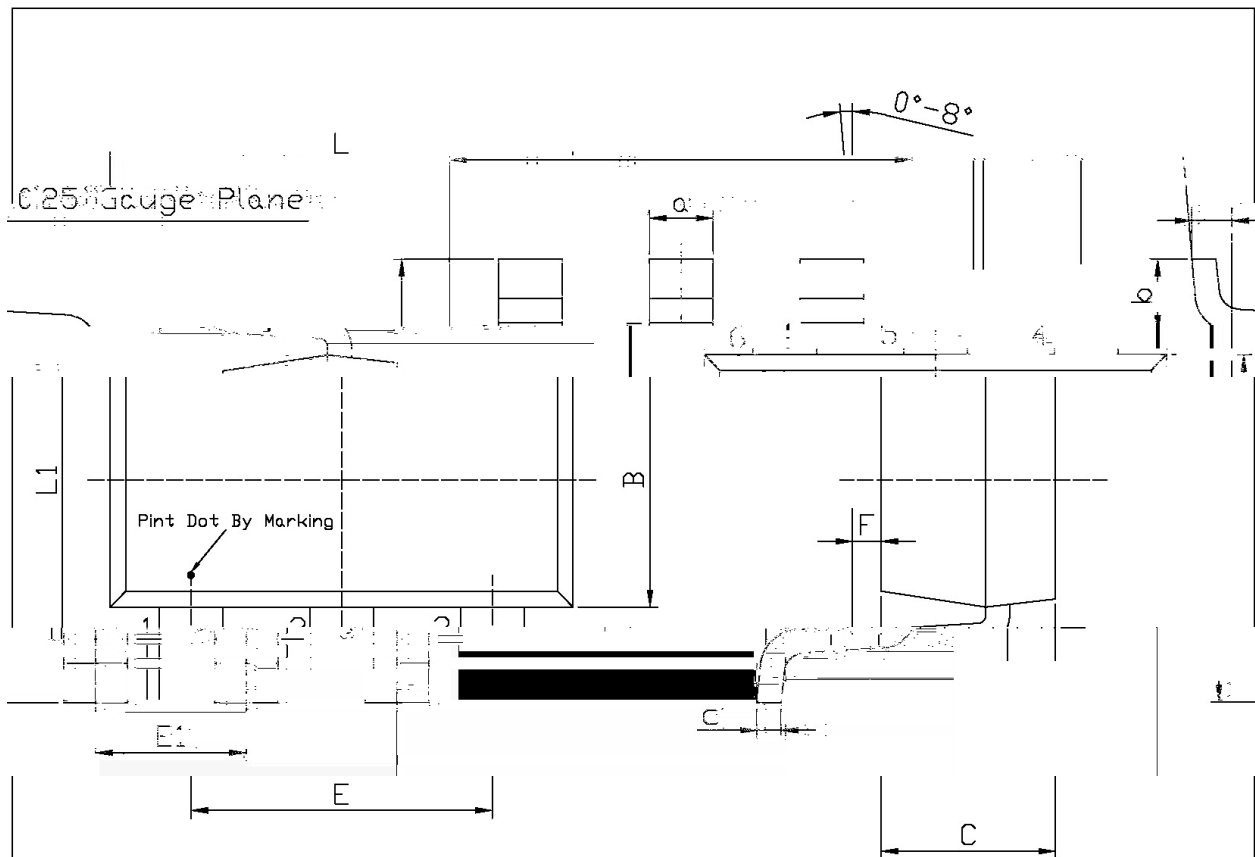
**/ Electrical Characteristics(Ta=25 )**

| Parameter                       | Symbol           | Test Conditions                                 | Min | Typ  | Max  | Unit |
|---------------------------------|------------------|-------------------------------------------------|-----|------|------|------|
| Reverse Stand-Off Voltage       | V <sub>RWM</sub> | I <sub>t</sub> =1mA                             |     |      | 5.0  | V    |
| Reverse Breakdown Voltage       | V <sub>BR</sub>  | I <sub>t</sub> =1mA                             | 6.0 |      |      | V    |
| Reverse Leakage Current         | I <sub>R</sub>   | V <sub>RWM</sub> =5V    T=25°C                  |     |      | 1.0  | μA   |
| Clamping Voltage                | V <sub>C1</sub>  | I <sub>PP</sub> =1.0A    t <sub>p</sub> =8/20μS |     | 8.5  | 12   | V    |
|                                 | V <sub>C2</sub>  |                                                 |     | 1.8  |      | V    |
| Capacitance. Any I/O pin to I/O | C <sub>J1</sub>  | V <sub>R</sub> =0V    f=1MHz                    |     | 0.35 | 0.45 | pF   |
| Capacitance. Any I/O pin to GND | C <sub>J2</sub>  |                                                 |     |      | 0.9  | pF   |

# I Electrical Characteristic Curve



/ Package Dimensions

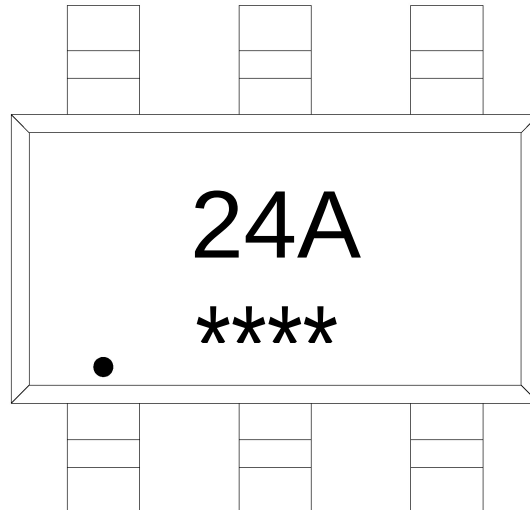


Unit: mm

| Symbol | Dimensions | Min  | Max  | Symbol | Dimensions | Min  | Max  |
|--------|------------|------|------|--------|------------|------|------|
| L      |            | 2.80 | 3.02 | a      |            | 0.80 | 1.05 |
| B      |            | 1.50 | 1.70 | c      |            | 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

**/ Marking Instructions**



24A

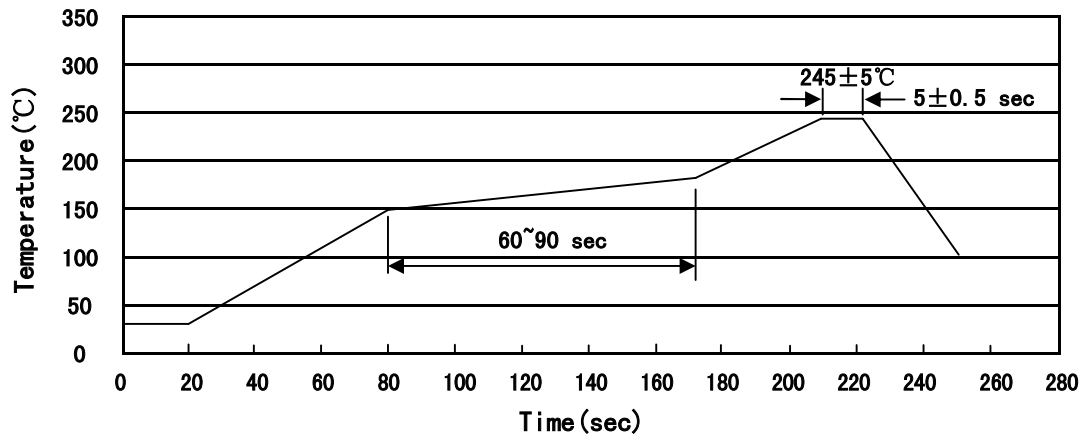
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Note:

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<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>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