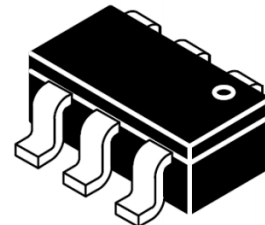


### Features

- Ultra low leakage: nA level
- Operating voltage: 24V
- Low clamping voltage
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 15\text{kV}$
    - Contact discharge:  $\pm 8\text{kV}$
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 12A (8/20 $\mu\text{s}$ )
- RoHS Compliant

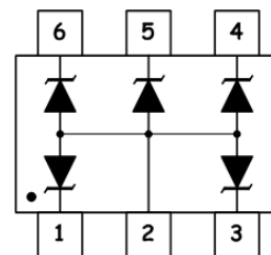
### Dimensions SOT-26



### Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

### Pin Configuration



### Mechanical Characteristics

- Package: SOT-26
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000pcs
- Reel Size: 7inch

### Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

| Parameter                              | Symbol           | Value       | Unit |
|--|------------------|-------------|------|
| Peak Pulse Power (8/20 $\mu\text{s}$ ) | Ppp              | 350         | W    |
| ESD per IEC 61000-4-2 (Air)            | V <sub>ESD</sub> | $\pm 15$    | Kv   |
| ESD per IEC 61000-4-2 (Contact)        |                  | $\pm 8$     |      |
| Operating Temperature Range            | T <sub>J</sub>   | -55 to +125 | °C   |
| Storage Temperature Range              | T <sub>STJ</sub> | -55 to +150 | °C   |

## Electrical Characteristics (TA=25°C unless otherwise specified)

| Part Number | Device Marking | V <sub>RWM</sub> (V) | V <sub>BR</sub> (V) | I <sub>T</sub> (mA) | V <sub>C</sub> @1A | V <sub>C</sub> |      | I <sub>R</sub> μA (Max) | C (Pf) (Typ.) |
|-------------|----------------|----------------------|---------------------|---------------------|--------------------|----------------|------|-------------------------|---------------|
|             |                |                      |                     |                     |                    | (Max)          | (@A) |                         |               |
| SMS24C      | TCK            | 24                   | 26.7                | 1                   | 38                 | 46             | 8    | 1                       | 50            |

## Characteristic Curves

Fig1. 8/20μs Pulse Waveform



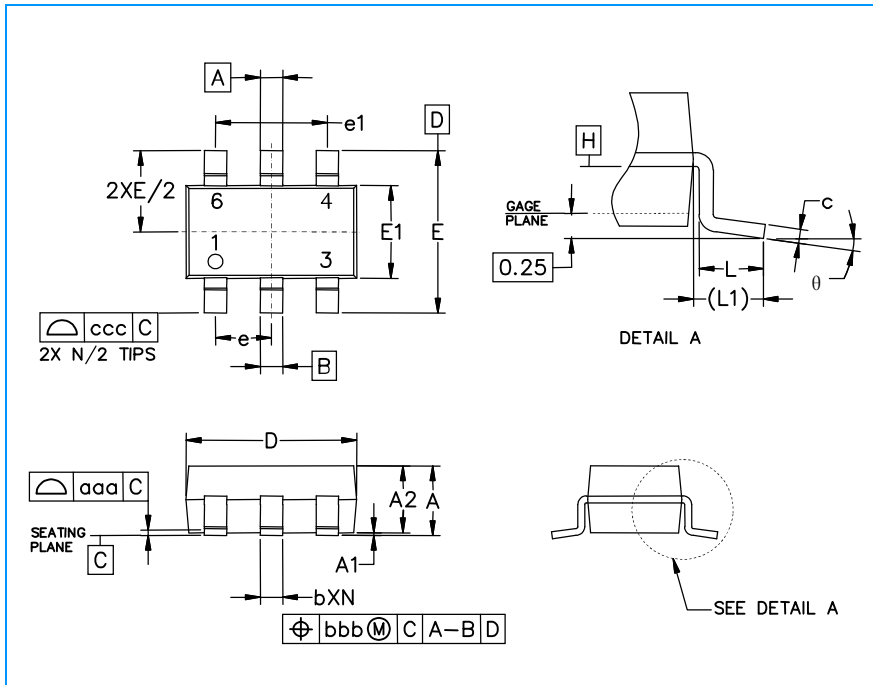
Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)



Fig3. Power Derating Curve

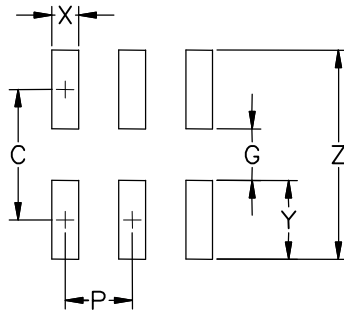


## SOT-26 Package Outline & Dimensions



| Symbol | Inches    |       |       | Millimeters |      |      |
|--------|-----------|-------|-------|-------------|------|------|
|        | Min.      | Nom.  | Max.  | Min.        | Nom. | Max. |
| A      | 0.035     | -     | 0.057 | 0.90        | -    | 1.45 |
| A1     | 0.000     | -     | 0.006 | 0.00        | -    | 0.15 |
| A2     | 0.035     | 0.045 | 0.051 | 0.90        | 1.15 | 1.30 |
| b      | 0.010     | -     | 0.020 | 0.25        | -    | 0.50 |
| c      | 0.003     | -     | 0.009 | 0.08        | -    | 0.22 |
| D      | 0.110     | 0.114 | 0.122 | 2.80        | 2.90 | 3.10 |
| E1     | 0.060     | 0.063 | 0.069 | 1.50        | 1.60 | 1.75 |
| E      | 0.110 BSC |       |       | 2.80 BSC    |      |      |
| e      | 0.037 BSC |       |       | 0.95 BSC    |      |      |
| e1     | 0.075 BSC |       |       | 1.90 BSC    |      |      |
| L      | 0.012     | 0.018 | 0.024 | 0.30        | 0.45 | 0.60 |
| L1     | (0.024)   |       |       | (0.60)      |      |      |
| theta  | 0°        | -     | 10°   | 0°          | -    | 10°  |
| aaa    | 0.004     |       |       | 0.10        |      |      |
| bbb    | 0.008     |       |       | 0.20        |      |      |
| ccc    | 0.008     |       |       | 0.20        |      |      |

### Soldering Footprint



| Symbol | Inches  | Millimeters |
|--------|---------|-------------|
| C      | (0.098) | (2.50)      |
| G      | 0.055   | 1.40        |
| P      | 0.037   | 0.95        |
| X      | 0.024   | 0.60        |
| Y      | 0.043   | 1.10        |
| Z      | 0.141   | 3.60        |

单击下面可查看定价，库存，交付和生命周期等信息

[>>Leiditech\(雷卯电子\)](#)