

## Ultra Low Capacitance TVS Diode Array

### APPLICATIONS

- ◆ USB Power & Data Line Protection
- ◆ Monitors and Flat Panel Displays
- ◆ Video Graphics Cards
- ◆ Digit Video Interface (DVI)
- ◆ SIM Ports
- ◆ High Definition Multi-Media Interface (HDMI)
- ◆ Set Top Box
- ◆ Projection TV

### IEC COMPATIBILITY

- ◆ IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50  $\eta$  s)
- ◆ IEC61000-4-5 (Lightning) 5A (8/20 $\mu$ s)

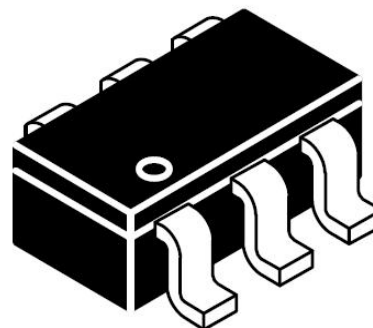
### FEATURES

- ◆ 200 Watts Peak Pulse Power per Line ( $t_p=8/20\mu\text{s}$ )
- ◆ Protects four high speed I/O lines
- ◆ Working voltages : 5V
- ◆ Low clamping voltage
- ◆ RoHS Compliant

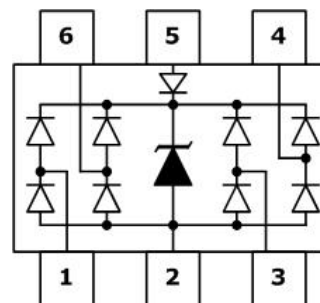
### MECHANICAL CHARACTERISTICS

- ◆ JEDEC SOT-26 Package
- ◆ Molding Compound Flammability Rating : UL 94V-O
- ◆ Weight 16.0 Milligrams (Approximate)
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free

#### SOT-26



#### PIN CONFIGURATION



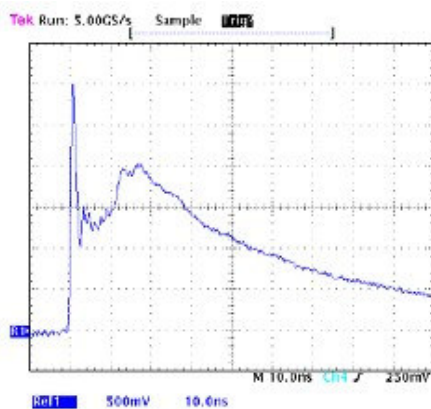
## DEVICE CHARACTERISTICS

### MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)

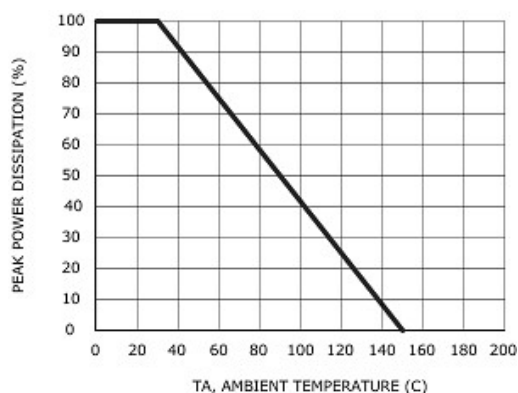
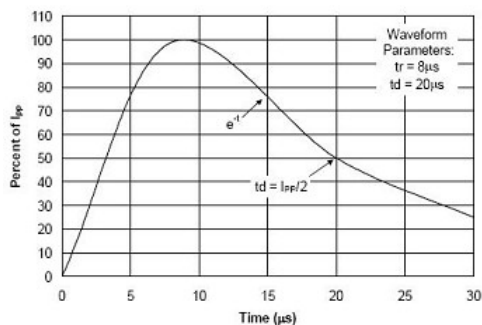
| PARAMETER                             | SYMBOL           | VALUE         | UNITS |
|---------------------------------------|------------------|---------------|-------|
| Peak Pulse Power (tp=8/20μs waveform) | P <sub>PP</sub>  | 200           | Watts |
| Lead Soldering Temperature            | T <sub>L</sub>   | 260 (10 sec.) | °C    |
| Operating Temperature Range           | T <sub>J</sub>   | -55 ~ 150     | °C    |
| Storage Temperature Range             | T <sub>STG</sub> | -55 ~ 150     | °C    |

### ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)

| PART NUMBER | DEVICE MARKING | V <sub>RWM</sub> | V <sub>B</sub> | I <sub>T</sub> | V <sub>C</sub> | V <sub>C</sub> |      | I <sub>R</sub> | C <sub>T</sub> |
|-------------|----------------|------------------|----------------|----------------|----------------|----------------|------|----------------|----------------|
|             |                | (V)<br>(max.)    | (V)<br>(min.)  | (mA)           | @1A<br>(max.)  | (max.)         | (@A) | (μA)<br>(max.) | (pF)<br>(typ.) |
| ULC0504D    | Y B05          | 5                | 6.5            | 1              | 9.8            | 17             | 3    | 0.1            | 0.7            |

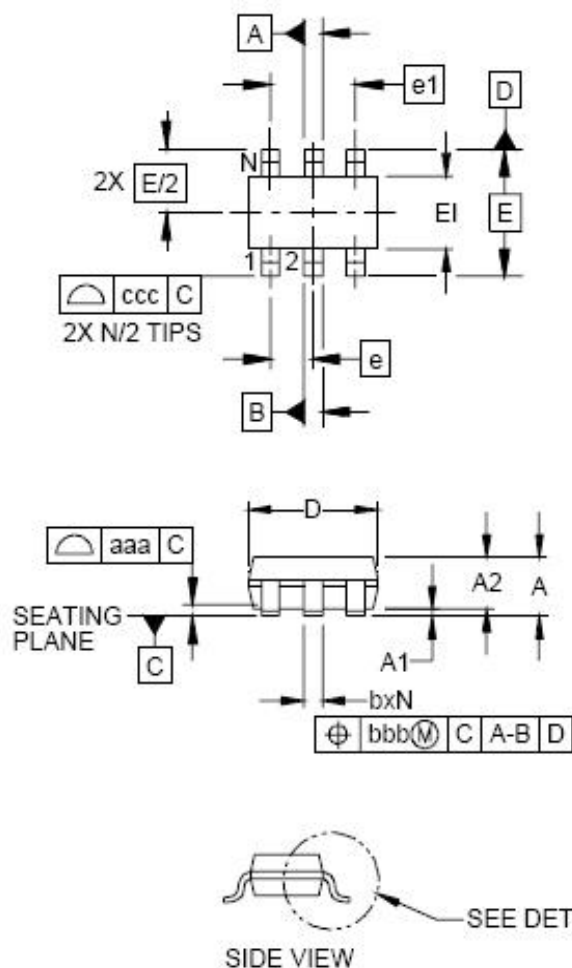


Pulse Waveform

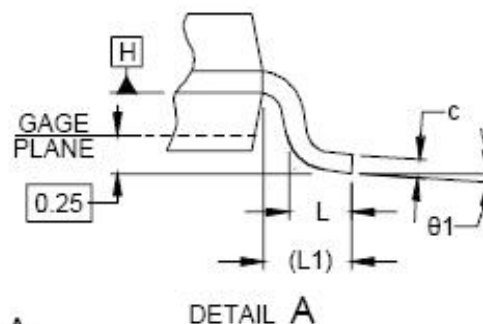


Power Derating Curve

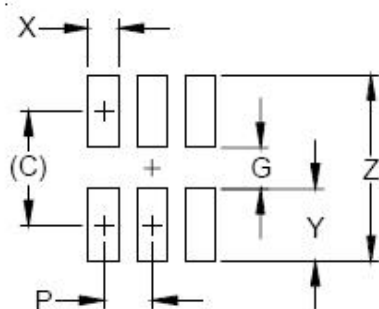
## SOT-26 PACKAGE OUTLINE & DIMENSIONS



| DIM | INCHES   |      |      | MILLIMETERS |      |      |
|-----|----------|------|------|-------------|------|------|
|     | MIN      | NOM  | MAX  | MIN         | NOM  | MAX  |
| A   | .035     | -    | .057 | 0.90        | -    | 1.45 |
| A1  | .000     | -    | .006 | 0.00        | -    | 0.15 |
| A2  | .035     | .045 | .051 | .90         | 1.15 | 1.30 |
| b   | .010     | -    | .020 | 0.25        | -    | 0.50 |
| c   | .003     | -    | .009 | 0.08        | -    | 0.22 |
| D   | .110     | .114 | .122 | 2.80        | 2.90 | 3.10 |
| E1  | .060     | .063 | .069 | 1.50        | 1.60 | 1.75 |
| E   | .110 BSC |      |      | 2.80 BSC    |      |      |
| e   | .037 BSC |      |      | 0.95 BSC    |      |      |
| e1  | .075 BSC |      |      | 1.90 BSC    |      |      |
| L   | .012     | .018 | .024 | 0.30        | 0.45 | 0.60 |
| L1  | (.024)   |      |      | (0.60)      |      |      |
| N   | 6        |      |      | 6           |      |      |
| θ1  | 0°       | -    | 10°  | 0°          | -    | 10°  |
| aaa | .004     |      |      | 0.10        |      |      |
| bbb | .008     |      |      | 0.20        |      |      |
| ccc | .008     |      |      | 0.20        |      |      |



### \* SOLDERING FOOTPRINT



| DIM | DIMENSIONS |             |
|-----|------------|-------------|
|     | INCHES     | MILLIMETERS |
| C   | (.098)     | (2.50)      |
| G   | .055       | 1.40        |
| P   | .037       | 0.95        |
| X   | .024       | 0.60        |
| Y   | .043       | 1.10        |
| Z   | .141       | 3.60        |

SHANGHAI LEIDITECH ELECTRONICS TECHNOLOGY CO., LTD

Phone: +86-021-50827201 <http://www.leiditech.com>

Email: sale1@leiditech.com