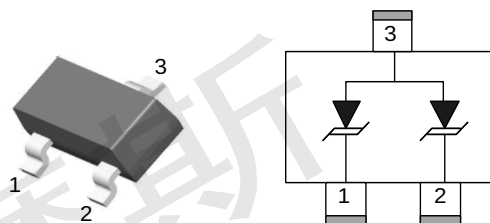


### Features

- 300Watts peak pulse power ( $T_P = 8/20\mu s$ )
- Tiny SOT-23 package
- Unidirectional configurations
- Protects two I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30kV$  contact  
 $\pm 30kV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4A (8/20 $\mu s$ )



### Mechanical Data

- **Case:** SOT-23 (plastic package).  
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- Cellular Handsets and Accessories
- RS-232, RS-422 & RS-485
- Control & Monitoring Systems
- Set-Top Box
- Portable Electronics
- Other electronics equipments Communication systems

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

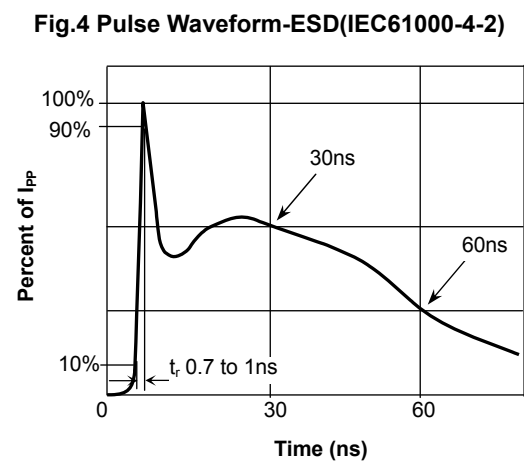
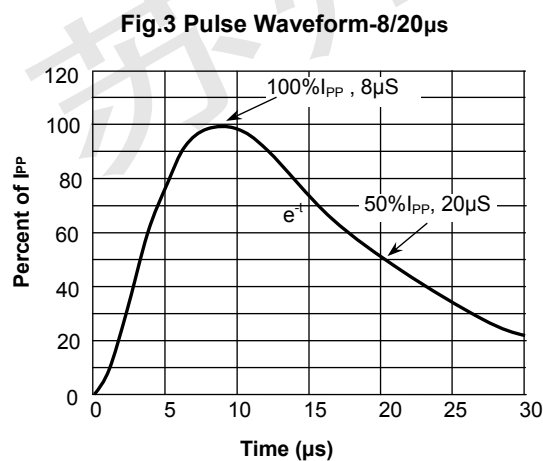
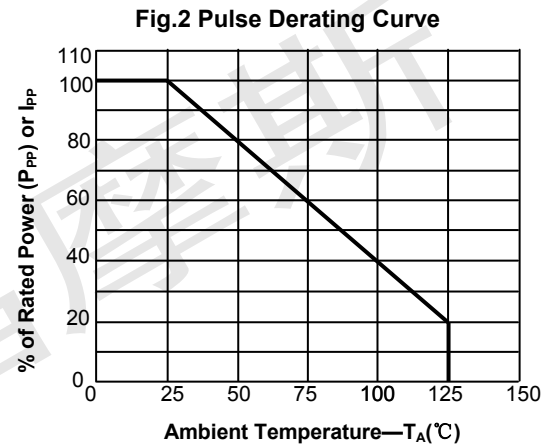
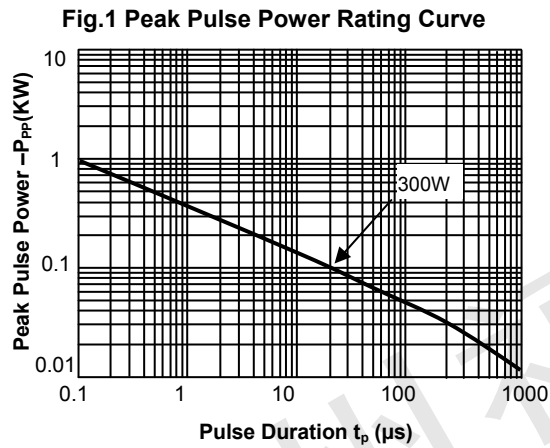
| Parameter                                 | Symbol    | Value       | Unit |
|-------------------------------------------|-----------|-------------|------|
| Peak Pulse Power ( $T_P=8/20\mu s$ )      | $P_{PP}$  | 300         | W    |
| ESD contact/air discharge (IEC-61000-4-2) | $V_{ESD}$ | 30/30       | kV   |
| Peak Pulse Current ( $T_P = 8/20\mu s$ )  | $I_{PP}$  | 4           | A    |
| Junction Temperature                      | $T_J$     | -55 to +125 | °C   |
| Storage temperature                       | $T_{STG}$ | -55 to +150 | °C   |

### Electrical Characteristics

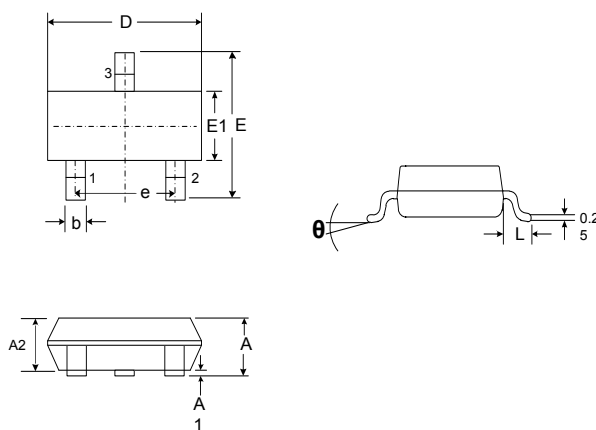
( $T_A = 25$  °C unless otherwise specified)

| Parameter                        | Symbol    | Condition        | Min | Typ | Max | Unit |
|----------------------------------|-----------|------------------|-----|-----|-----|------|
| Reverse stand-off Voltage        | $V_{RWM}$ |                  |     |     | 36  | V    |
| Reverse Breakdown Voltage        | $V_{BR}$  | $I_T=1mA$        | 37  |     |     | V    |
| Reverse Leakage Current          | $I_R$     | $V_{RWM}=36V$    |     |     | 1   | uA   |
| Clamping Voltage (IEC 61000-4-5) | $V_C$     | $I_{PP}=4A$      |     | 75  |     | V    |
| Junction Capacitance             | $C_J$     | $V_R=0V, f=1MHz$ |     | 25  |     | pF   |

### Typical Characteristics ( $T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

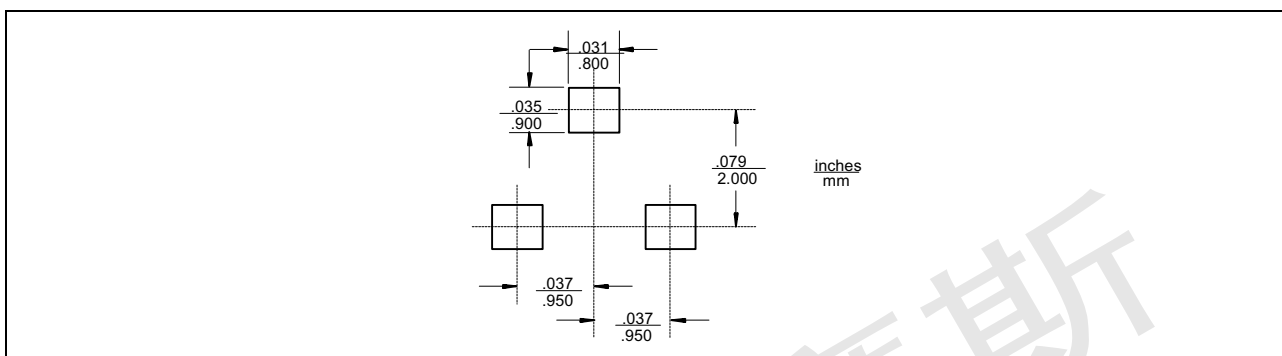


### Package Dimensions

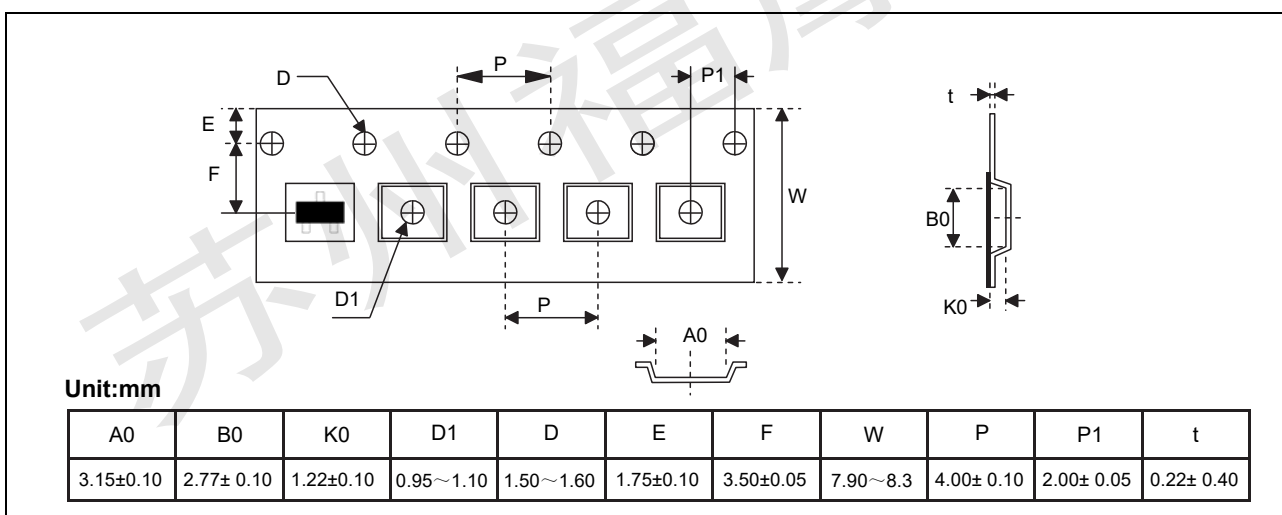


| SYMBOL | DIMENSIONS |      |          |        |
|--------|------------|------|----------|--------|
|        | MILLIMETER |      | INCHES   |        |
|        | MIN        | MAX  | MIN      | MAX    |
| A      | 0.89       | 1.12 | 0.035    | 0.044  |
| A1     | 0.01       | 0.10 | 0.0006   | 0.0043 |
| A2     | 0.88       | 1.02 | 0.035    | 0.040  |
| D      | 2.80       | 3.04 | 0.110    | 0.120  |
| E      | 2.10       | 2.64 | 0.082    | 0.104  |
| E1     | 1.20       | 1.40 | 0.047    | 0.055  |
| e      | 1.90BSC    |      | 0.75 BSC |        |
| L      | 0.40       | 0.60 | 0.015    | 0.024  |
| θ      | 0          | 8    | 0        | 8      |

### Pad Dimensions



### Pad Dimensions



### Marking



### Ordering information

| Order code   | Package | Packaging option | Base quantity  | Packaging specification |
|--------------|---------|------------------|----------------|-------------------------|
| CEST23NC36VU | SOT-23  | Tape and reel    | 3000pcs / reel | EIA STD RS-481          |