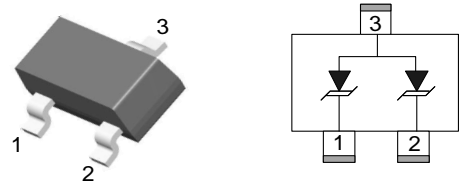


ESD TVS Array in SOT-23

Features

- 320Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny SOT-23 package
- Unidirectional configurations
- Protects one 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) 20A (8/20 μs)



Mechanical Data

- **Case:** SOT-23 (plastic package).
Lead free; RoHS compliant
- **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

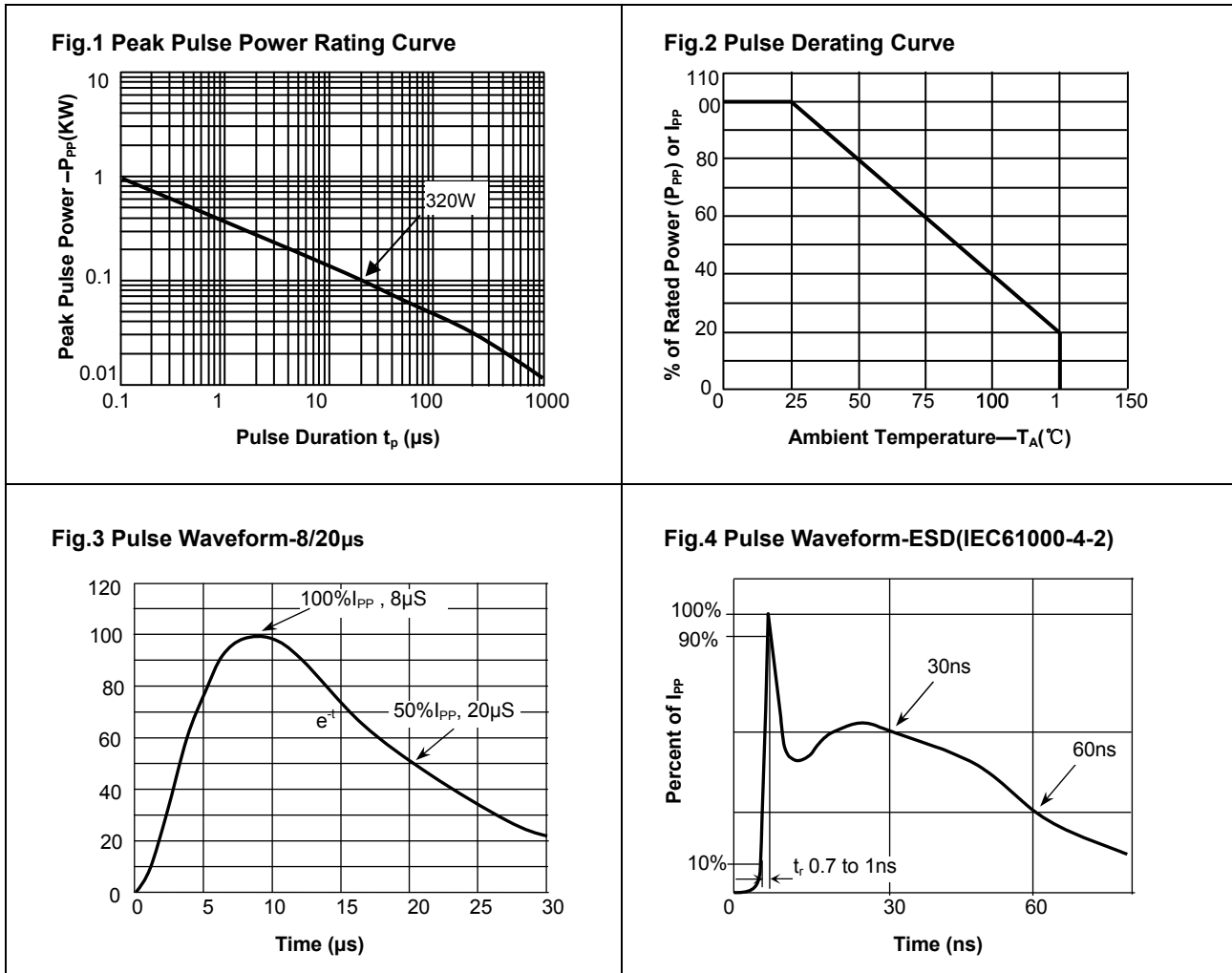
| Parameter | Symbol | Value | Unit |
|--|-----------|---------------|------|
| ESD Air Discharge per IEC 61000-4-2 | V_{ESD} | ± 30 | kV |
| ESD Contact Discharge per IEC 61000-4-2 | V_{ESD} | ± 30 | kV |
| Peak pulse power 8/20 μs waveform | P_{PPM} | 350 | W |
| Peak pulse current 8/20 μs waveform | I_{PPM} | 20 | A |
| Operating Temperature | T_J | - 55 to + 125 | °C |
| Storage Temperature | T_{STG} | - 55 to + 150 | °C |

Electrical Characteristics

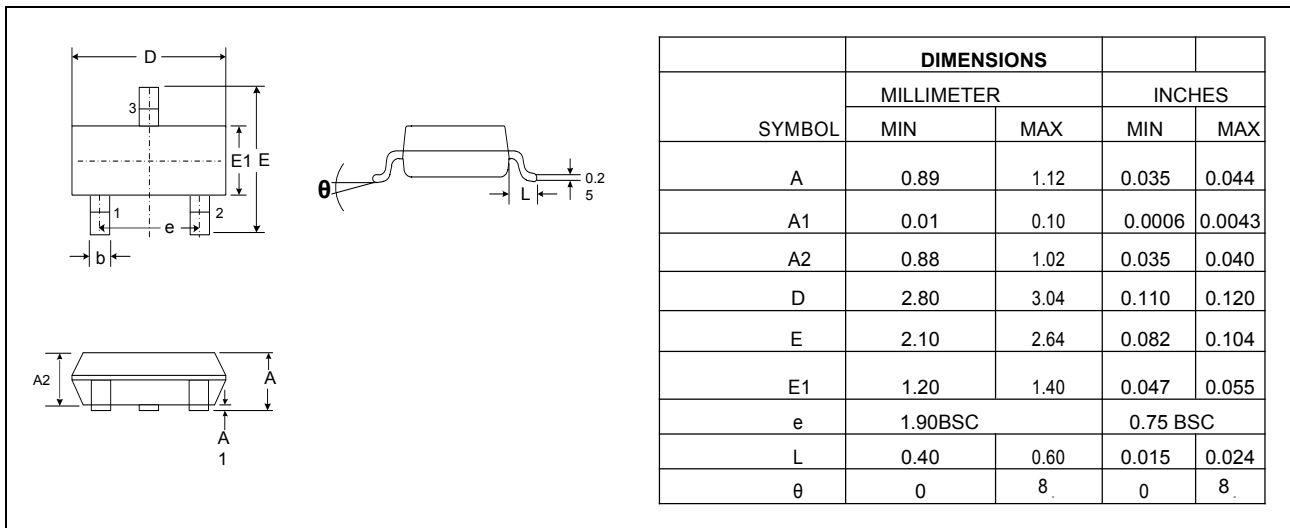
($T_A = 25$ °C unless otherwise specified)

| Parameter | Test Conditions | Symbol | Min. | Typ. | Max. | Unit |
|---------------------------|--|-----------|------|------|------|---------|
| Reverse Stand-Off Voltage | | V_{RWM} | | | 5 | V |
| Reverse current | at $V_R = 5$ V | I_R | | | 1 | μA |
| Clamping voltage | at $I_{PP} = 10A$, Acc. IEC 61000-4-5 | V_C | | | 12 | V |
| Clamping voltage | at $I_{PP} = 20A$, Acc. IEC 61000-4-5 | V_C | | | 16 | V |
| Reverse Breakdown Voltage | at $I_R = 1$ mA | V_{BR} | 6 | | | V |
| Capacitance | at $V_R = 0$ V ; $f = 1$ MHz | C_D | | 60 | | pF |

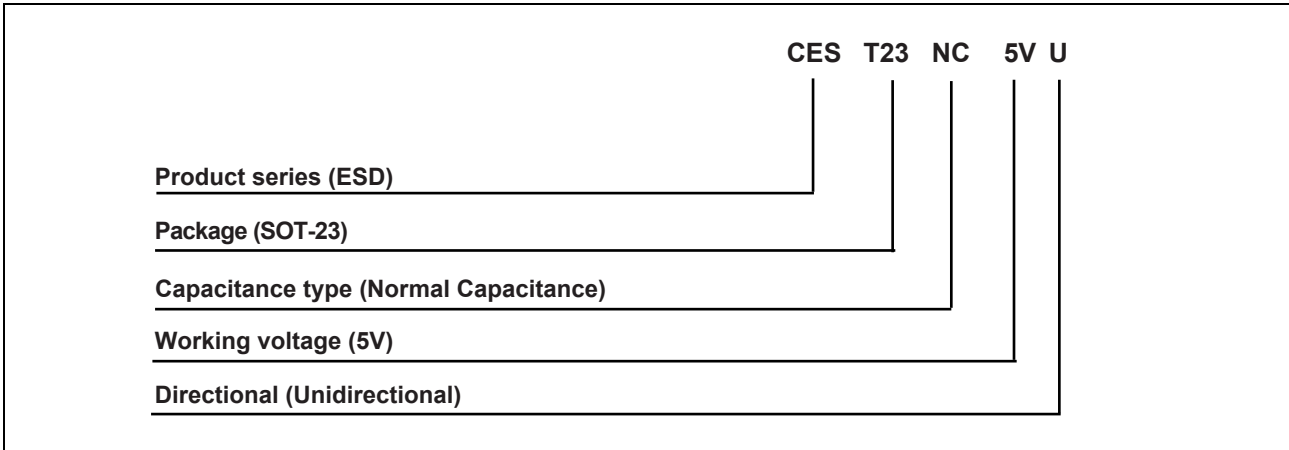
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



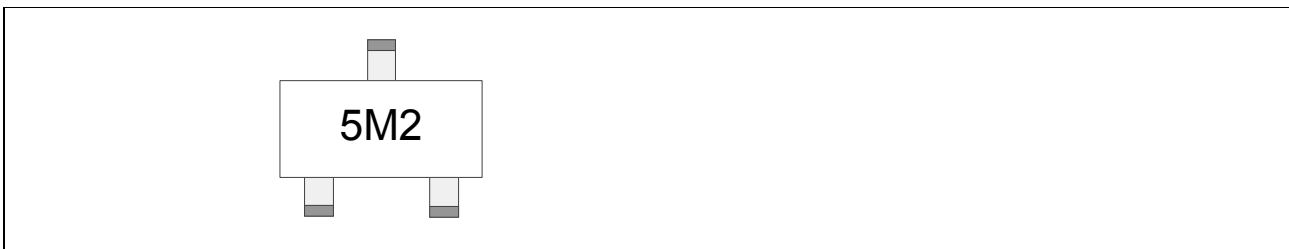
Package Dimensions



Part number system



Marking



Ordering information

| Order code | Package | Packaging option | Base quantity | Packaging specification |
|-------------|---------|------------------|----------------|-------------------------|
| CEST23NC5VU | SOT-23 | Tape and reel | 3000pcs / reel | EIA STD RS-481 |

Revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 23-May-2012 | 1.0 | Initial release |

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