

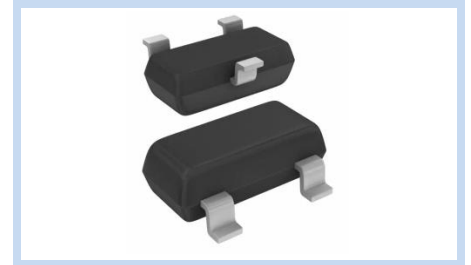
ESD Suppressor 3V 2- Unidirectional SOT-23

ME32U7V8S23

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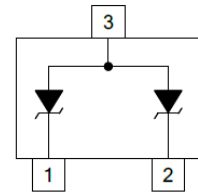
FEATURE

- IEC 61000-4-2 ESD: $\pm 15\text{KV}$ (Air) $\pm 8\text{KV}$ (Contact)
- ESD Protection for one Bidirectional Channel
- ESD Protection for two Unidirectional Channels
- Low Clamping Voltage
- Low Leakage Current



APPLICATION

- Data Line Protection
- Industrial Controls
- Notebook Computers
- Set-Top Box
- Projection TV
- Cellular Handsets and Accessories



MAXIMUM RATINGS AND CHARACTERISTICS

| Parameter | Symbol | Value | Unit |
|--|-----------|----------|--------------------|
| ESD Voltage (Contact discharge) | V_{ESD} | ± 8 | KV |
| ESD Voltage (Air discharge) | | ± 15 | |
| Peak Pulse Current ($t_p=8/20\mu s$) | I_{PP} | 6 | A |
| Peak Pulse Power ($t_p=8/20\mu s$) | P_{PP} | 300 | W |
| Operating Temperature Range | T_J | -55~+125 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{STG} | -55~+150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS

| Parameter | Condition | Symbol | Min. | Typ. | Max. | Unit |
|--------------------------------|--------------------------------------|-----------|------|------|------|---------------|
| Reverse Stand-Off Voltage | -- | V_{RWM} | -- | -- | 3 | V |
| Reverse Breakdown Voltage | $I_{BR}=1\text{mA}$ | V_{BR} | 4 | -- | -- | V |
| Reverse Leakage Current | $V_{RWM}=3\text{V}$ | I_R | -- | -- | 20 | μA |
| Clamping Voltage | $I_{PP}=1\text{A}$, $t_p=8/20\mu s$ | V_C | -- | -- | 7.8 | V |
| Off State Junction Capacitance | $V_{dc}=0$, $f=1\text{MHz}$ | C_J | -- | 53 | 87 | pF |

Notes: $T_A=25^{\circ}\text{C}$ unless otherwise specified

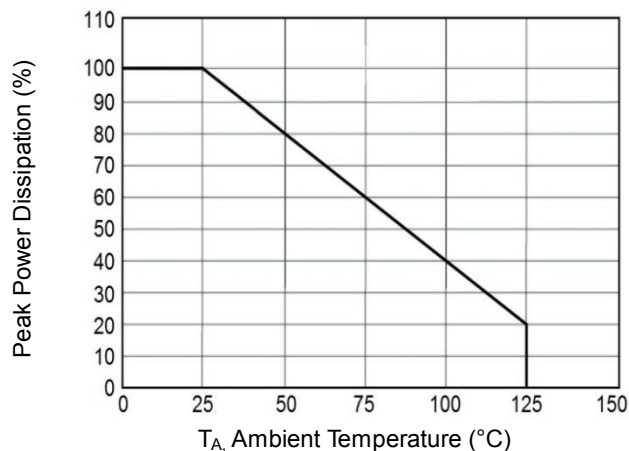
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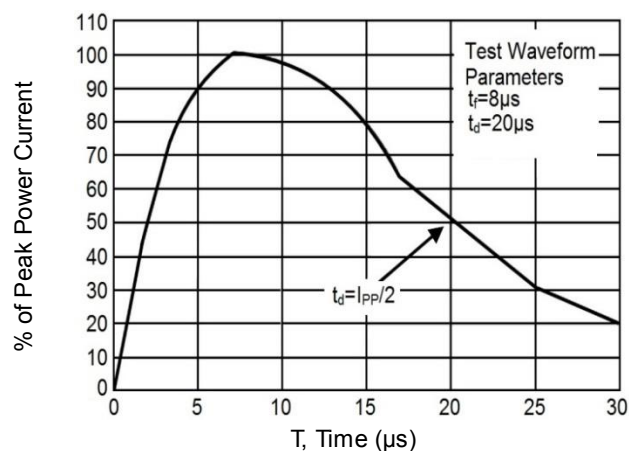
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CHARACTERISTIC CURVES

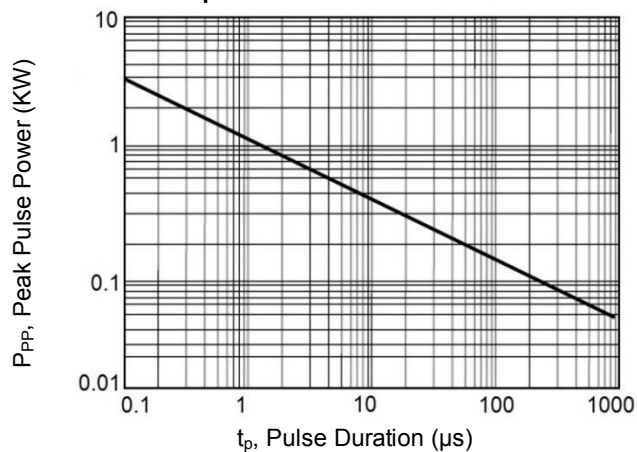
Power Derating Curve



Pulse Waveforms

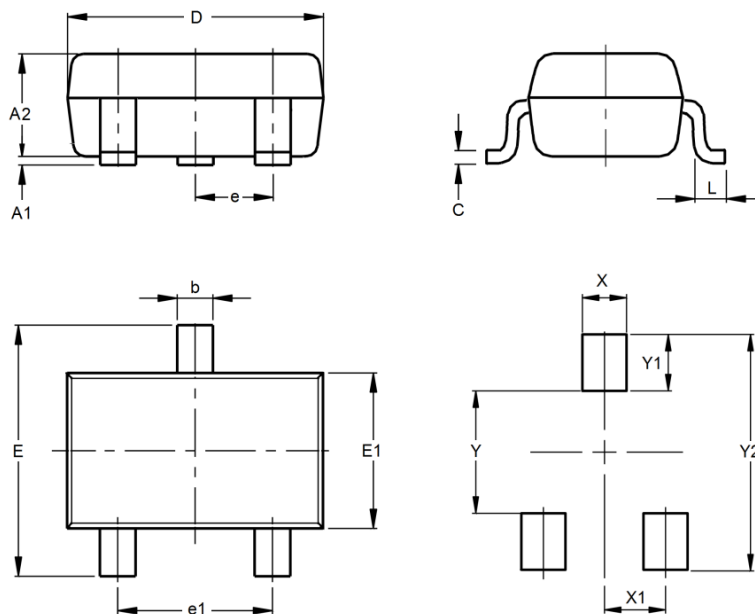


Non-Repetitive Peak Pulse vs. Pulse Time



DIMENSIONS AND RECOMMENDED LAND PATTERN

| Item | Min (mm) | Max (mm) |
|------|----------|----------|
| A1 | 0.08 | 0.20 |
| A2 | 0.81 | 1.20 |
| b | 0.30 | 0.50 |
| C | 0.00 | 0.10 |
| D | 2.70 | 3.10 |
| e | -- | -- |
| e1 | 1.78 | 2.04 |
| E | 2.10 | 2.80 |
| E1 | 1.20 | 1.60 |
| L | 0.15 | -- |
| X | 0.80 | 0.80 |
| X1 | 1.35 | 1.35 |
| Y | 2.90 | 2.90 |
| Y1 | 0.90 | 0.90 |
| Y2 | 2.00 | 2.00 |



*Specifications subject to change without notice.