

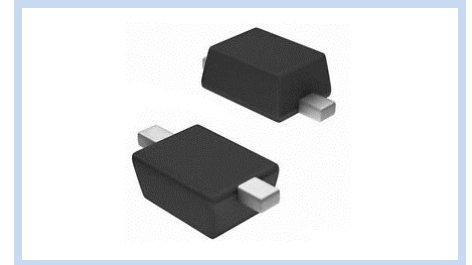
# ESD Suppressor 36V Unidirectional SOD-523

ME361U55S523

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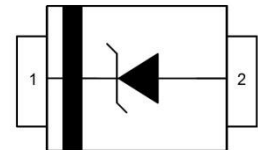
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 25\text{KV}$  (Air)  $\pm 25\text{KV}$  (Contact)
- ESD Protection for one Unidirectional Channel
- Low Clamping Voltage
- Low Leakage Current



## APPLICATION

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Cordless Phones
- Peripherals
- MP3 Players



## MAXIMUM RATINGS AND CHARACTERISTICS

| Parameter                              | Symbol         | Value    | Unit               |
|--|----------------|----------|--------------------|
| ESD Voltage (Contact discharge)        | $V_{ESD}$      | $\pm 25$ | KV                 |
| ESD Voltage (Air discharge)            |                | $\pm 25$ |                    |
| Peak Pulse Current ( $t_p=8/20\mu s$ ) | $I_{PP}$       | 1        | A                  |
| Peak Pulse Power ( $t_p=8/20\mu s$ )   | $P_{PP}$       | 120      | W                  |
| Operating & Storage Temperature Range  | $T_J, T_{STG}$ | -55~+150 | $^{\circ}\text{C}$ |

## ELECTRICAL CHARACTERISTICS

| Parameter                      | Condition                              | Symbol    | Min. | Typ. | Max. | Unit          |
|--------------------------------|--|-----------|------|------|------|---------------|
| Reverse Stand-Off Voltage      | --                                     | $V_{RWM}$ | --   | --   | 36   | V             |
| Reverse Breakdown Voltage      | $I_{BR}=1\text{mA}$                    | $V_{BR}$  | 40   | --   | --   | V             |
| Reverse Leakage Current        | $V_R=36\text{V}$                       | $I_R$     | --   | --   | 5    | $\mu\text{A}$ |
| Clamping Voltage               | $I_{PP}=1\text{A}, t_p=8/20\mu s$      | $V_C$     | --   | --   | 55   | V             |
| Off State Junction Capacitance | $V_{dc}=0, \text{Bias}, f=1\text{MHz}$ | $C_J$     | --   | --   | 20   | pF            |

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

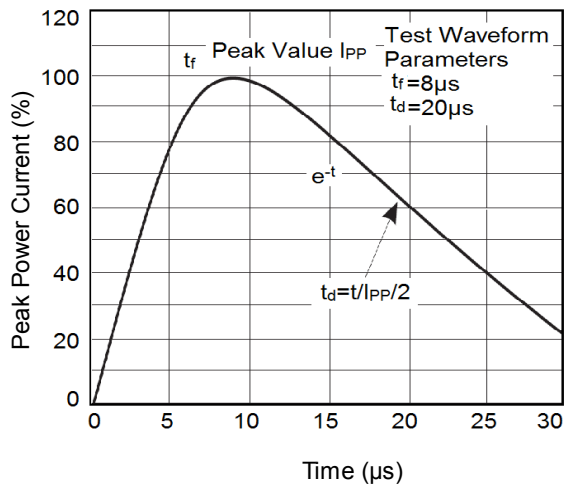
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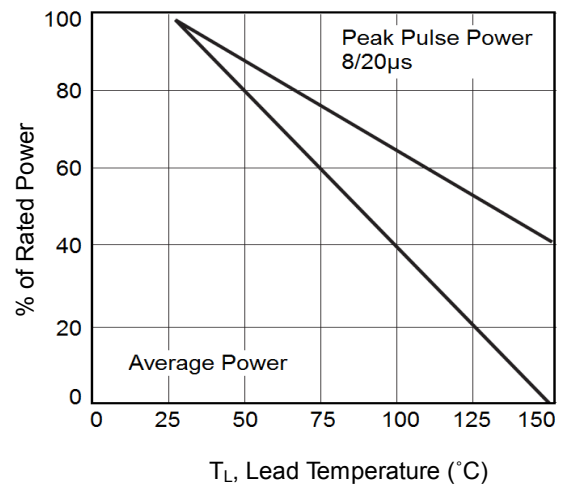
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## CHARACTERISTIC CURVES

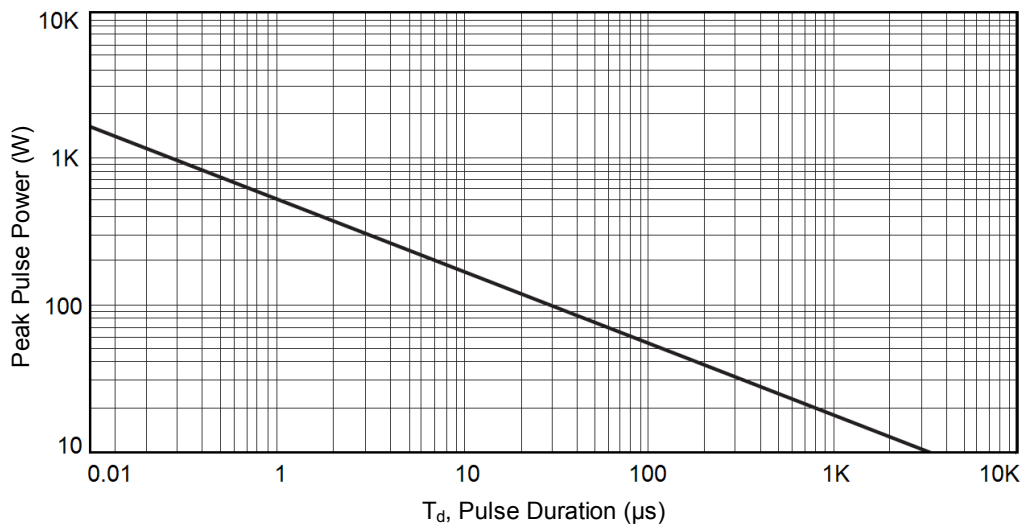
Pulse Waveforms



Power Derating Curve



Peak Pulse Power vs Pulse Time



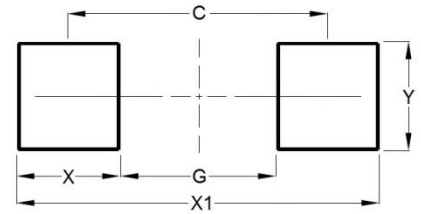
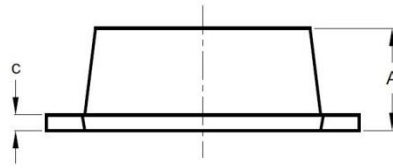
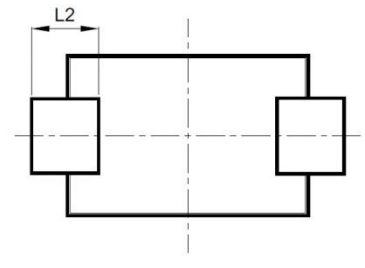
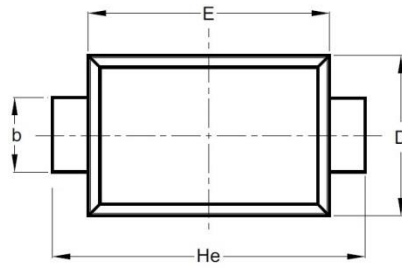
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

| Item | Min (mm) | Max (mm) |
|------|----------|----------|
| A    | 0.55     | 0.65     |
| b    | 0.25     | 0.35     |
| C    | 0.05     | 0.15     |
| D    | 0.75     | 0.85     |
| E    | 1.15     | 1.25     |
| He   | 1.50     | 1.70     |
| L2   | 0.20     | 0.20     |
| C    | 1.40     | 1.40     |
| G    | 0.80     | 0.80     |
| X    | 0.60     | 0.60     |
| X1   | 2.00     | 2.00     |
| Y    | 0.70     | 0.70     |



\*Specifications subject to change without notice.