

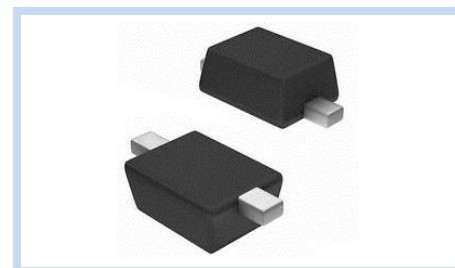
# ESD Suppressor 24V Unidirectional SOD-323F

ME241U45S323F

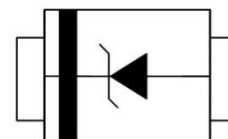
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## FEATURE

- IEC 61000-4-2 ESD:  $\pm 30\text{KV}$  (Air)  $\pm 30\text{KV}$  (Contact)
- ESD Protection for One Unidirectional Channel
- High Surge Capability
- Low Leakage Current
- Low Clamping Voltage



- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Peripherals
- Portable Devices



## MAXIMUM RATINGS AND CHARACTERISTICS

| Parameter                               | Symbol         | Value    | Unit               |
|---|----------------|----------|--------------------|
| ESD Voltage (Contact discharge)         | $V_{ESD}$      | $\pm 30$ | KV                 |
| ESD Voltage (Air discharge)             |                | $\pm 30$ |                    |
| Operating and 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      | --  | $V_{RWM}$ | --   | --   | 24   | V             |
| Reverse Breakdown Voltage      | $I_{BR}=1\text{mA}$                         | $V_{BR}$  | 26   | --   | 30   | V             |
| Reverse Leakage Current        | $V_R=24\text{V}$                            | $I_R$     | --   | --   | 1    | $\mu\text{A}$ |
| Clamping Voltage               | $I_{PP}=14\text{A}$ , $t_p=8/20\mu\text{s}$ | $V_C$     | --   | --   | 45   | V             |
| Off State Junction Capacitance | $V_{dc}=0$ , Bias, $f=1\text{MHz}$          | $C_J$     | --   | --   | 100  | pF            |

Notes:

1.  $T_J=25^{\circ}\text{C}$  unless otherwise specified.
2. Non-repetitive current pulse.
3. Mounted on copper pads to each terminal.
4. Peak pulse power waveform is  $t_p=8/20\mu\text{s}$ .
5. A transient suppressor is selected according to the working peak reverse voltage ( $V_{RWM}$ ), which should be equal to or greater than the DC or continuous peak operating voltage level.

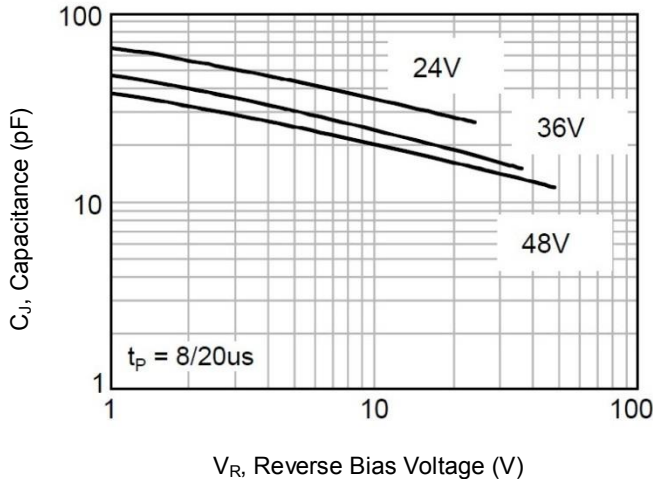
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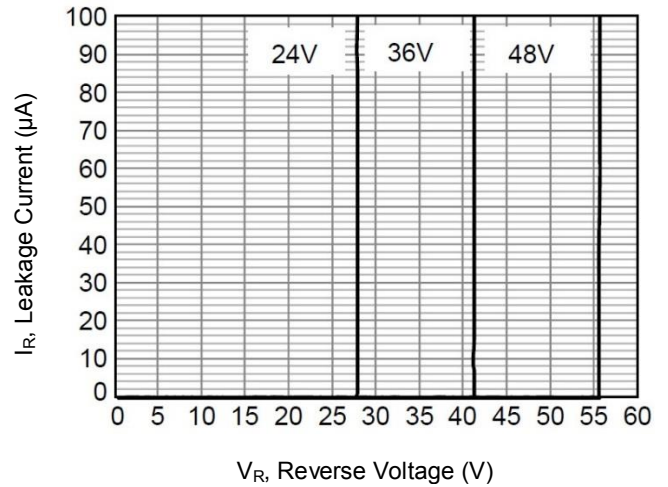
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## CHARACTERISTIC CURVES

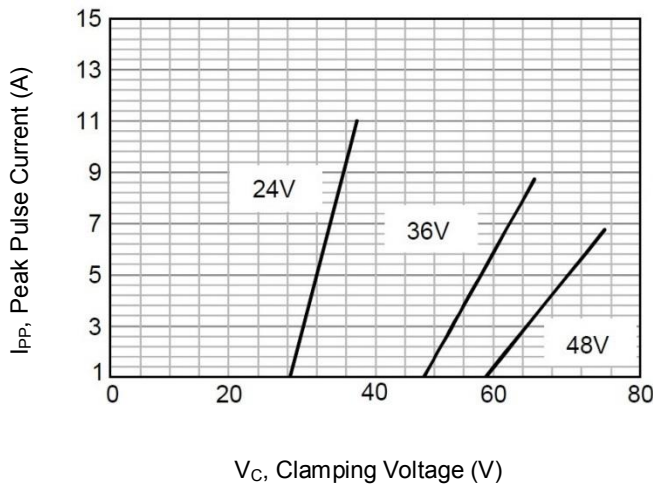
Typical Junction Capacitance



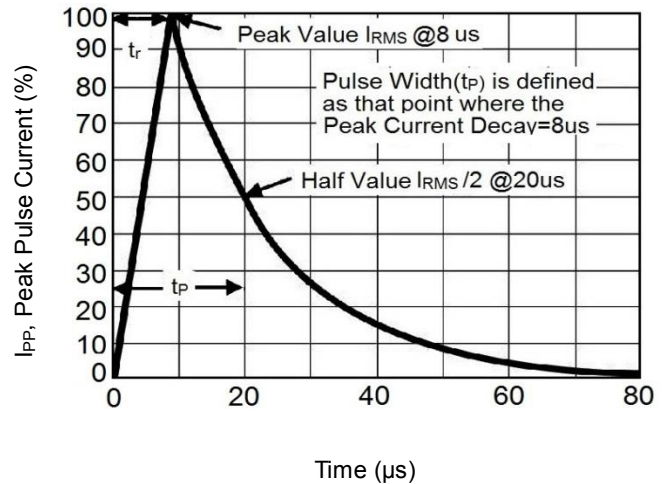
Typical Reverse Characteristics



Typical Peak Clamping Voltage



Pulse Waveform



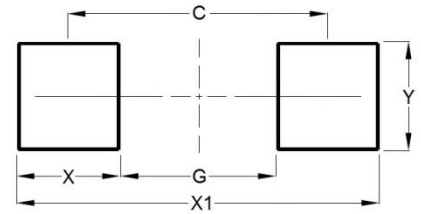
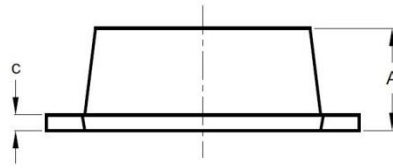
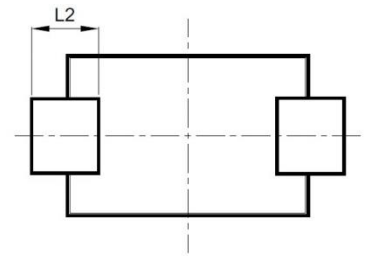
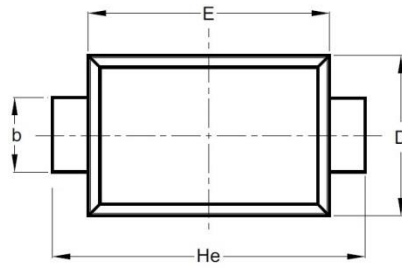
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

| Item | Min (mm) | Max (mm) |
|------|----------|----------|
| A    | 0.70     | 0.90     |
| b    | 0.25     | 0.35     |
| C    | 0.05     | 0.15     |
| D    | 1.15     | 1.35     |
| E    | 1.75     | 1.95     |
| He   | 2.30     | 2.70     |
| L2   | 0.30     | -        |
| C    | 2.00     | 2.00     |
| G    | 1.30     | 1.30     |
| X    | 0.70     | 0.70     |
| X1   | 2.70     | 2.70     |
| Y    | 0.40     | 0.40     |



\*Specifications subject to change without notice.