

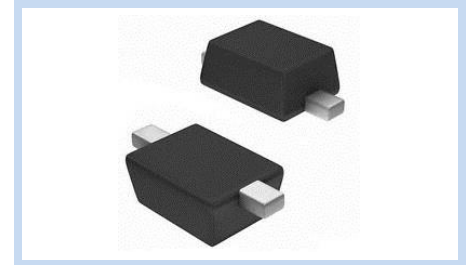
ESD Suppressor 48V Unidirectional SOD-323

ME481U80S323F

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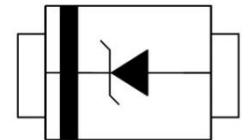
FEATURE

- 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



APPLICATION

- 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} | ± 30 | KV |
| ESD Voltage (Air discharge) | | ± 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} | -- | -- | 48 | V |
| Reverse Breakdown Voltage | $I_{BR}=1\text{mA}$ | V_{BR} | 53.3 | -- | 58.9 | V |
| Reverse Leakage Current | $V_R=48\text{V}$ | I_R | -- | -- | 1 | μA |
| Clamping Voltage | $I_{PP}=6.5\text{A}, t_p=8/20\mu\text{s}$ | V_C | -- | -- | 80 | V |
| Off State Junction Capacitance | $V_{dc}=0, \text{Bias}, f=1\text{MHz}$ | C_J | -- | -- | 60 | 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.

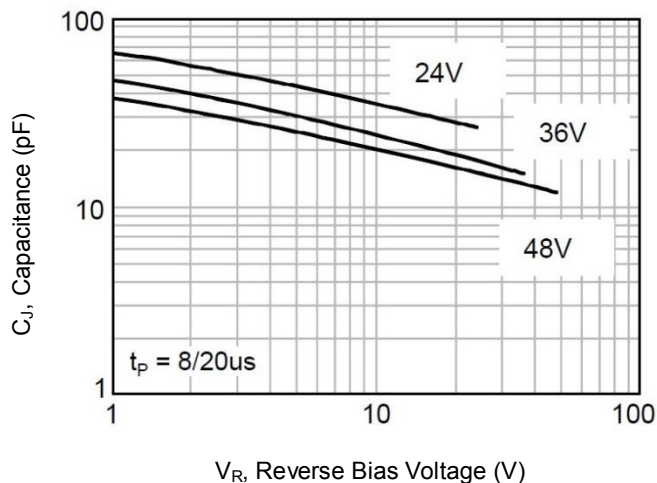
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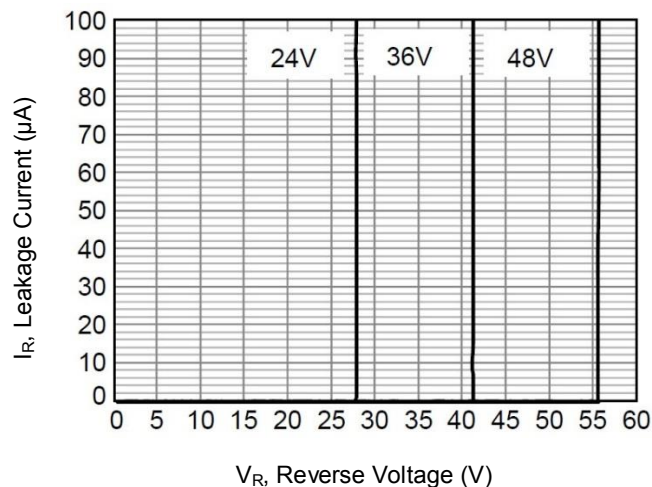
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CHARACTERISTIC CURVES

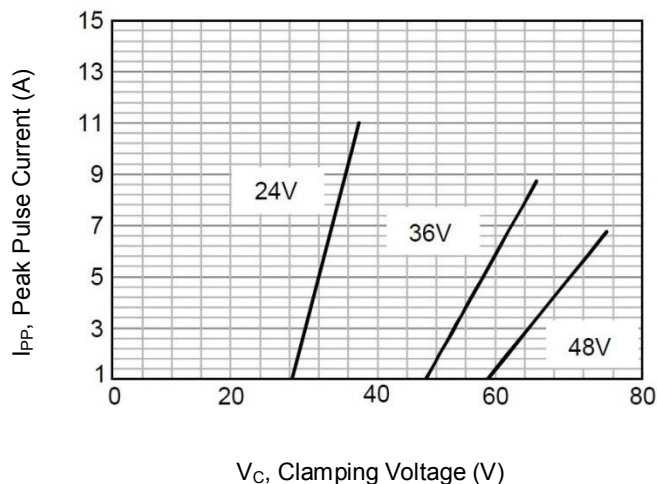
Typical Junction Capacitance



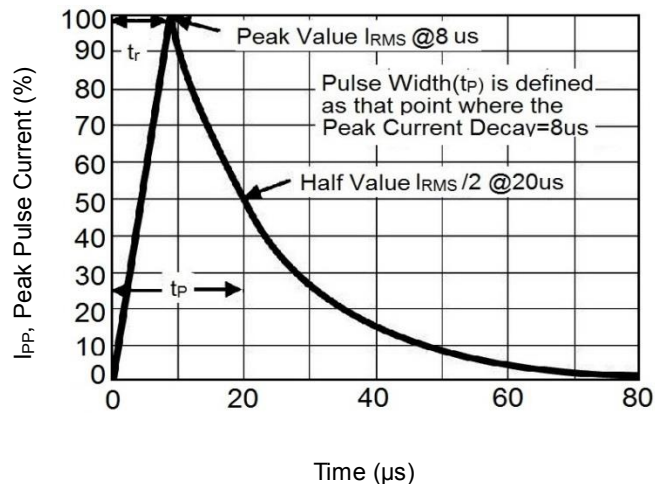
Typical Reverse Characteristics



Typical Peak Clamping Voltage



Pulse Waveform



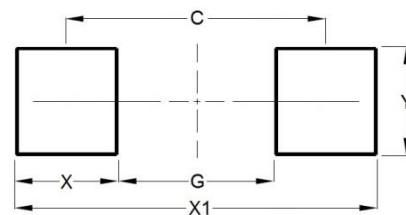
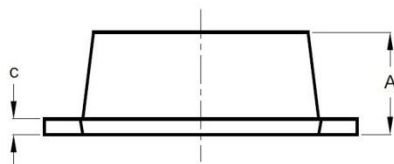
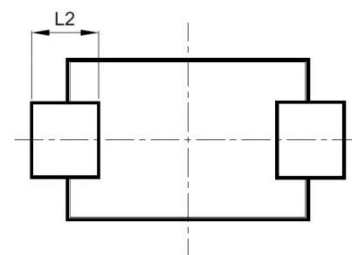
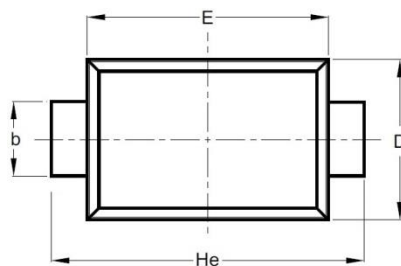
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DIMENSIONS AND RECOMMENDED LAND PATTERN

| 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.