

Features

- 420 W peak pulse power (tp=8/20us)
- Ultra small package: SOD-323
- Ultra low leakage: nA level
- Low clamping voltage
- 2-pin leadless package
- RoHS compliant



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) ± 30 kV (air), ± 30 kV (contact)
- IEC 61000-4-5 (Lightning) 10A(8/20us)

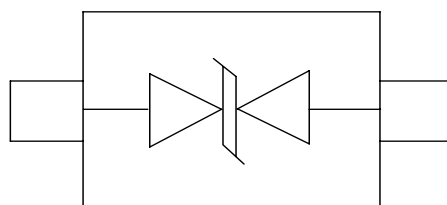
Mechanical Characteristics

- Package: SOD-323
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel
- RoHS/WEEE Compliant
- MSD Level: 2

Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Peripherals
- Pagers Peripherals
- Desktops and Servers

Schematic and PIN Configuration

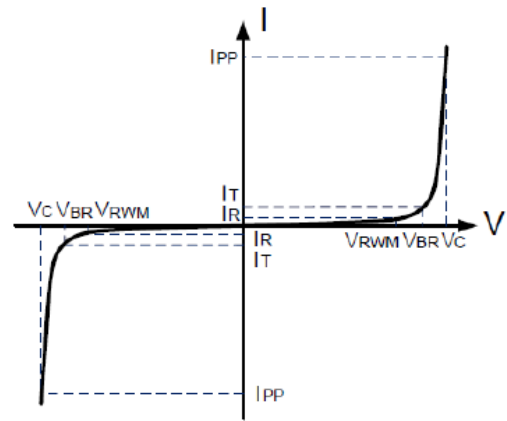


Absolute Maximum Ratings (TA=25°C unless otherwise specified)

| Rating | Symbol | Value | Units |
|--|-----------|--------------|-------|
| Peak Pulse Power ($t_p = 8/20\mu s$) | P_{PP} | 420 | W |
| Peak Pulse Current ($t_p = 8/20\mu s$) | I_{pp} | 10 | A |
| ESD per IEC 61000-4-2(Air) | V_{ESD} | ± 30 | kV |
| ESD per IEC 61000-4-2(contact) | | ± 30 | |
| Operating Temperature | T_J | -55 to + 125 | °C |
| Storage Temperature | T_{STG} | -55 to +150 | °C |

Portion Electronics Parameter

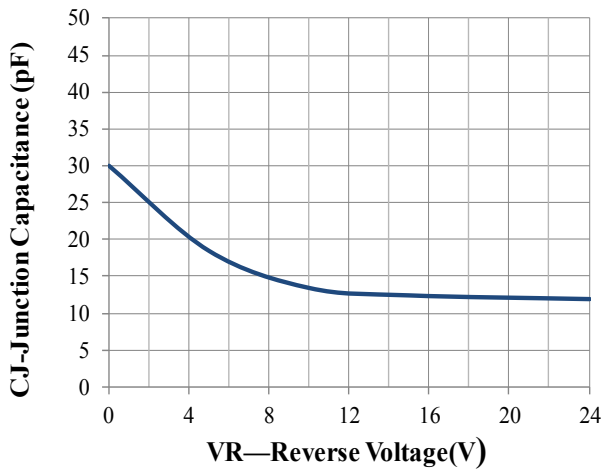
| Symbol | Parameter |
|----------|------------------------------------|
| I_T | Test Current |
| I_{PP} | Maximum Reverse Peak Pulse Current |
| V_c | Clamping Voltage @ I_c |



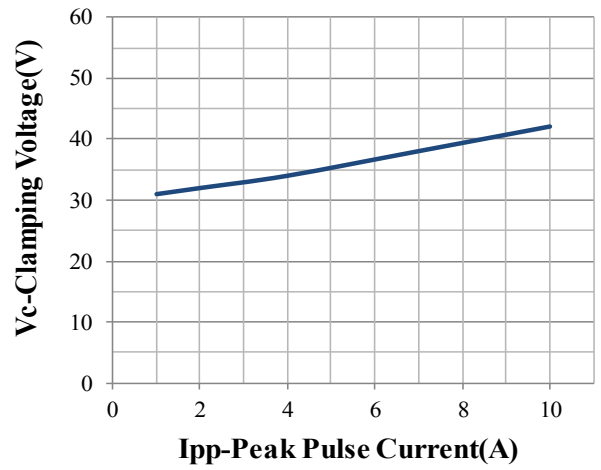
Electrical Characteristics (TA=25°C unless otherwise specified)

| Parameter | Symbol | Conditions | Min | Typical | Max | Units |
|---------------------------|-----------|---------------------------------|------|---------|------|---------|
| Reverse Stand-Off Voltage | V_{RWM} | | | | 24.0 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T = 1mA$ | 26.0 | 28.0 | 30.5 | V |
| Reverse Leakage Current | I_R | $V_{RWM} = 24.0V$ | | | 0.5 | μA |
| Clamping Voltage | V_c | $I_{PP} = 1A, t_p = 8/20\mu s$ | | | 35 | V |
| | | $I_{PP} = 10A, t_p = 8/20\mu s$ | | 40 | 45 | V |
| Junction Capacitance | C_j | $V_R = 0V, f = 1MHz$ | | 30 | 50 | pF |

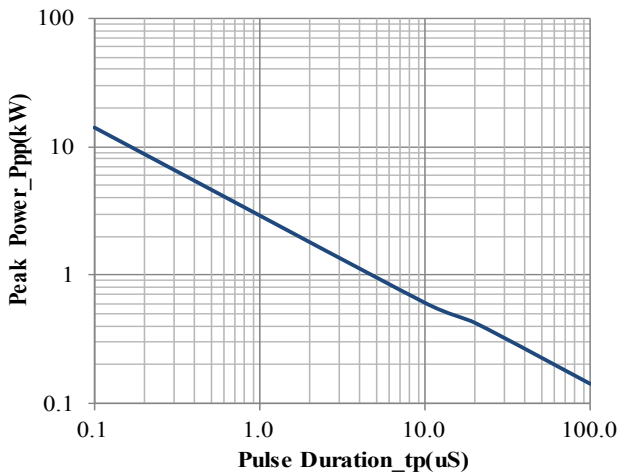
Typical Characteristics(TA=25°C unless otherwise Specified)



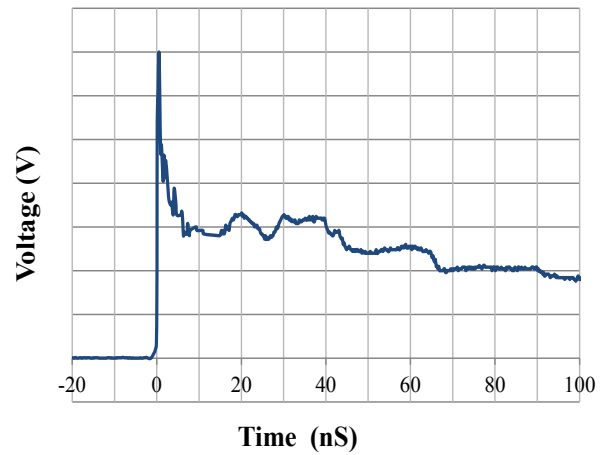
Junction Capacitance vs. Reverse Voltage



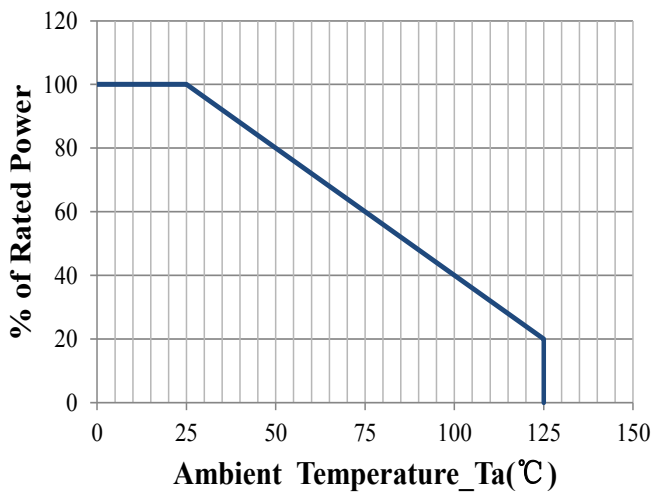
Clamping Voltage vs. Peak Pulse Current



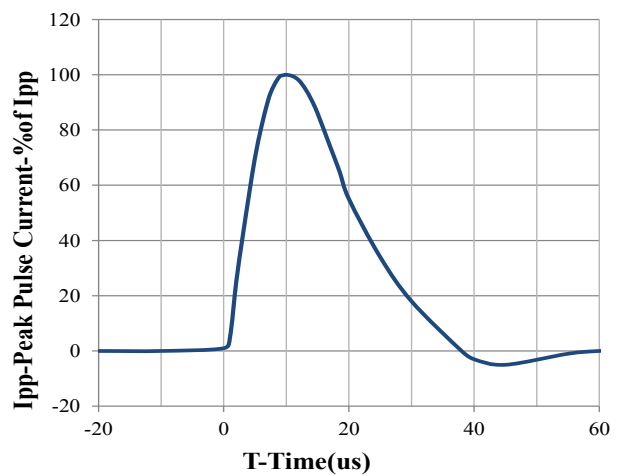
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

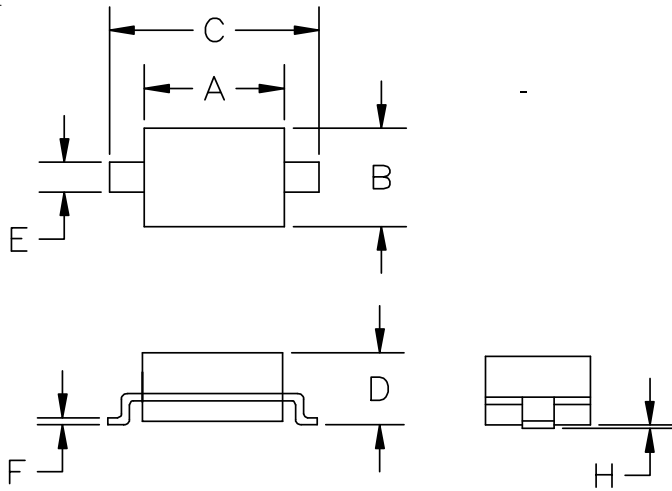


Power Derating Curve



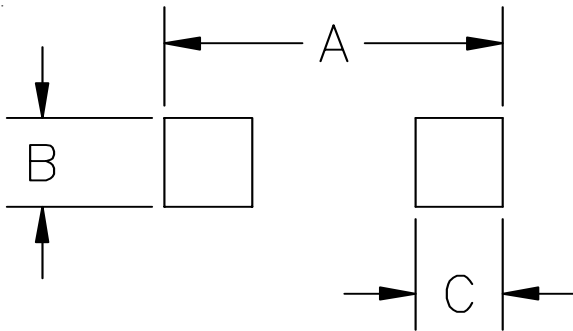
8 X 20us Pulse Waveform

SOD-323 Package Outline Drawing



| SYM | DIMENSIONS | | | |
|-----|-------------|------|--------|-------|
| | MILLIMETERS | | INCHES | |
| | MIN | MAX | MIN | MAX |
| A | 1.50 | 1.80 | 0.060 | 0.071 |
| B | 1.20 | 1.40 | 0.045 | 0.054 |
| C | 2.30 | 2.70 | 0.090 | 0.107 |
| D | - | 1.10 | - | 0.043 |
| E | 0.30 | 0.40 | 0.012 | 0.016 |
| F | 0.10 | 0.25 | 0.004 | 0.010 |
| H | - | 0.10 | - | 0.004 |

Suggested Land Pattern



| SYM | DIMENSIONS | |
|-----|-------------|--------|
| | MILLIMETERS | INCHES |
| A | 3.15 | 0.120 |
| B | 0.80 | 0.031 |
| C | 0.80 | 0.031 |

Order Information

| Order code | Package | Packaging | Reel Size |
|------------|---------|------------------|-----------|
| MSD3C241VA | SOD-323 | 3000/Tape & Reel | 7 inch |

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:

Click to view products by [Me-TECH](#) manufacturer:

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [DESD5V0U1BB-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#)
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD105-B1-02EL E6327](#) [ESD112-B1-02EL E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)
[3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DESD5V0U1BL-7B](#) [DRTR5V0U4SL-7](#)
[SCM1293A-04SO](#) [ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [SMF8.0A-TP](#) [SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#) [VESD12A1A-](#)
[HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [D1213A-02WL-7](#)
[1SMB33CAT3G-XYZ](#) [MMAD1108/TR13](#) [5KP100A](#) [5KP15A](#) [5KP18A](#) [5KP48A](#)