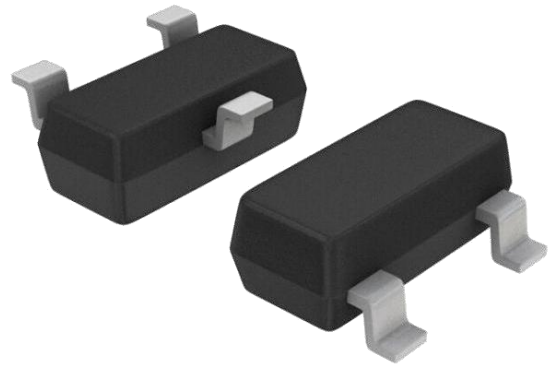


»Features

- 280 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5 (Lightning) 6A(8/20 $\mu s$ )



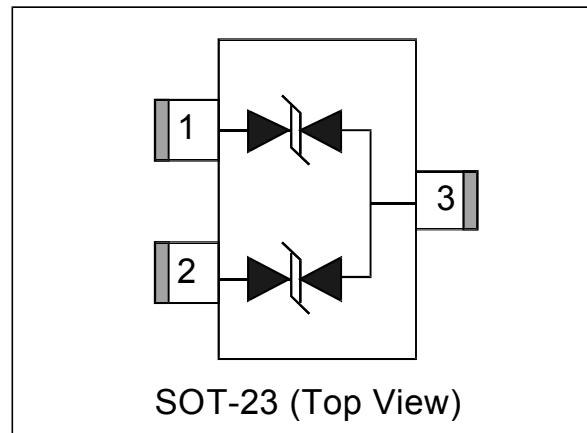
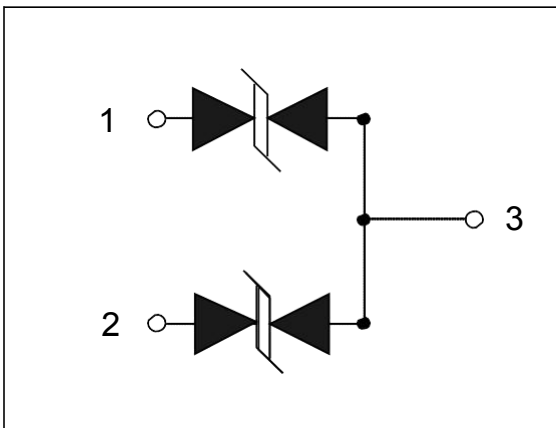
»Applications

- Dataline
- Automatic Teller Machines
- Net works
- Power line

»Mechanical Data

- SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

»Schematic & PIN Configuration



»Absolute Maximum Rating

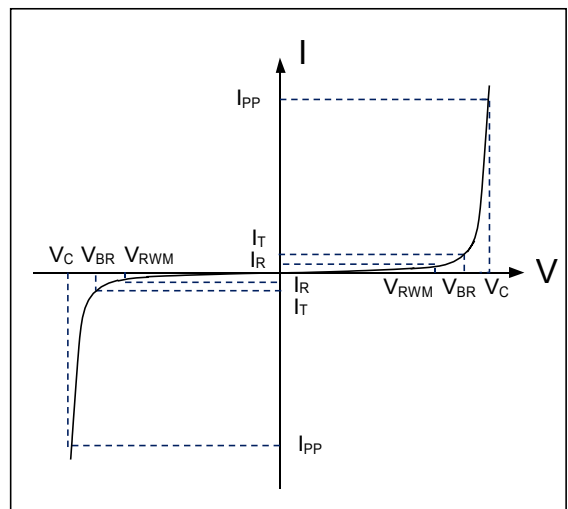
| Rating   | Symbol    | Value          | Units |
|--|-----------|----------------|-------|
| Peak Pulse Power ( $t_p=8/20\mu s$ )                           | $P_{PP}$  | 280            | Watts |
| Peak Pulse Current ( $t_p=8/20\mu s$ ) (note1)                 | $I_{pp}$  | 6              | A     |
| ESD per IEC 61000-4-2 (Air)<br>ESD per IEC 61000-4-2 (Contact) | $V_{ESD}$ | 30<br>30       | kV    |
| Lead Soldering Temperature                                     | $T_L$     | 260(10seconds) | °C    |
| Junction Temperature   | $T_J$     | -55 to + 125   | °C    |
| Storage Temperature  | $T_{stg}$ | -55 to + 125   | °C    |

»Electrical Characteristics

| Parameter                 | Symbol    | Conditions                  | Min  | Typical | Max  | Units   |
|---------------------------|-----------|-----------------------------|------|---------|------|---------|
| Reverse Stand-Off Voltage | $V_{RWM}$ |                             |      |         | 24.0 | V       |
| Reverse Breakdown Voltage | $V_{BR}$  | $I_T=1mA$                   | 26.7 | 30.0    | 34.0 | V       |
| Reverse Leakage Current   | $I_R$     | $V_{RWM}=24V, T=25^\circ C$ |      | 0.1     | 0.5  | $\mu A$ |
| Peak Pulse Current        | $I_{pp}$  | $t_p=8/20\mu s$             |      |         | 6    | A       |
| Clamping Voltage          | $V_C$     | $I_{pp}=6A, t_p=8/20\mu s$  |      | 48      | 55   | V       |
| Junction Capacitance      | $C_j$     | $V_R = 0V, f = 1MHz$        |      | 12      | 15   | pF      |

»Electrical Parameters (TA = 25°C unless otherwise noted)

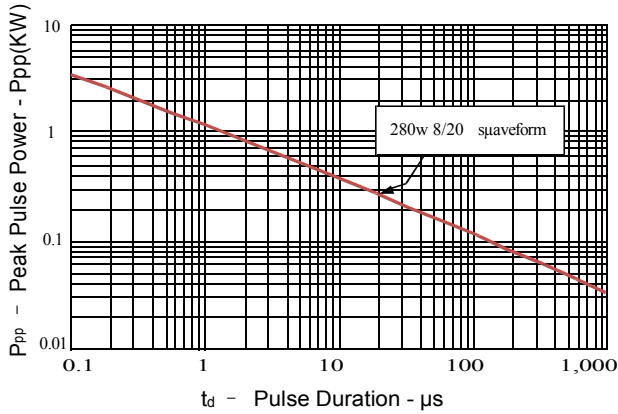
| Symbol    | Parameter                                   |
|-----------|---|
| $I_{PP}$  | Maximum Reverse Peak Pulse Current          |
| $V_C$     | Clamping Voltage @ $I_{PP}$                 |
| $V_{RWM}$ | Working Peak Reverse Voltage                |
| $I_R$     | Maximum Reverse Leakage Current @ $V_{RWM}$ |
| $V_{BR}$  | Breakdown Voltage @ $I_T$                   |
| $I_T$     | Test Current                                |
|           |   |
|           |   |



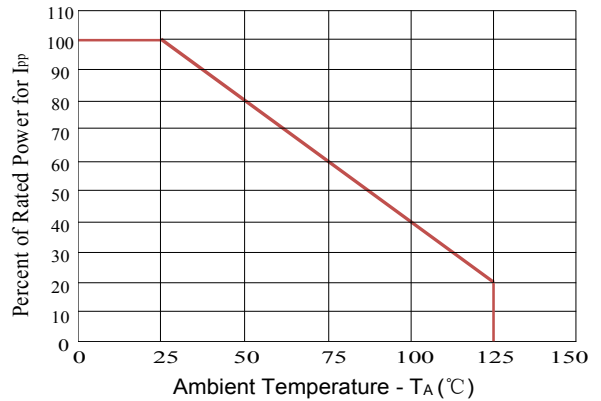
Note: 8/20 $\mu s$  pulse waveform.

»TypicalCharacteristics

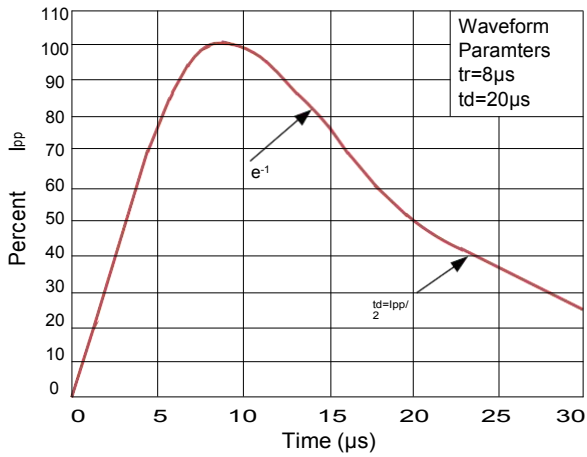
**Figure 1: Peak Pulse Power vs. Pulse Time**



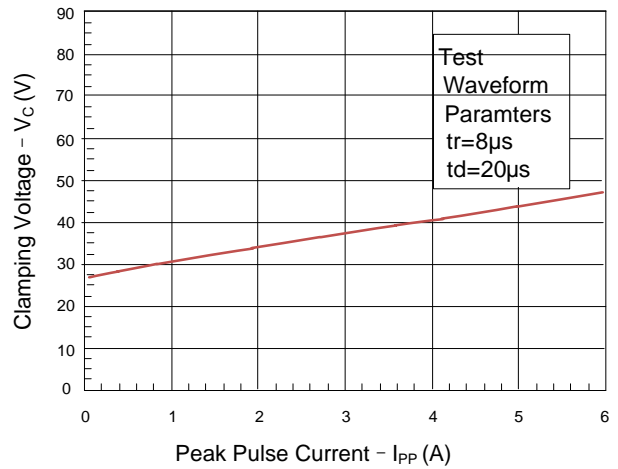
**Figure 2: Power Derating Curve**



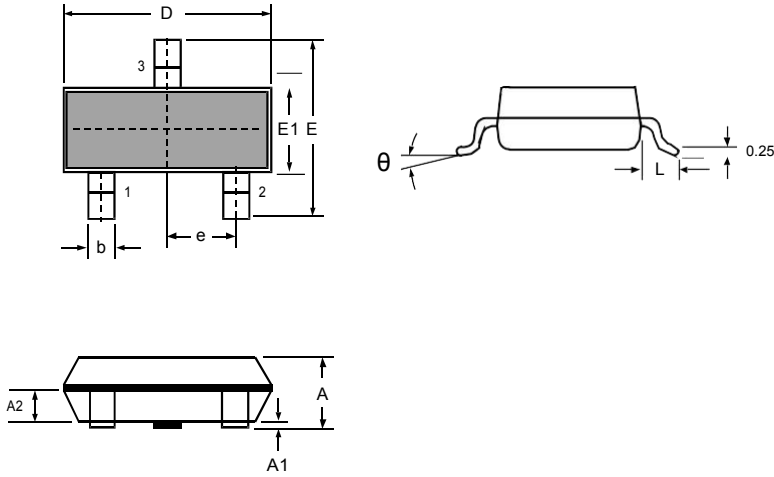
**Figure3: Pulse Waveform**



**Figure 4: Clamping Voltage vs.Ipp**

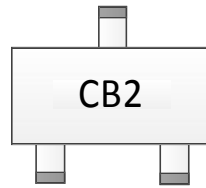


»Outline Drawing – SOT-23



| DIMENSIONS |            |       |           |       |
|------------|------------|-------|-----------|-------|
| SYMBOL     | MILLIMETER |       | INCHES    |       |
|            | MIN        | MAX   | MIN       | MAX   |
| A          | 0.900      | 1.150 | 0.035     | 0.045 |
| A1         | 0.000      | 0.100 | 0.000     | 0.004 |
| A2         | 0.900      | 1.050 | 0.035     | 0.041 |
| D          | 2.800      | 3.000 | 0.110     | 0.118 |
| b          | 0.300      | 0.500 | 0.012     | 0.020 |
| E          | 2.250      | 2.550 | 0.089     | 0.100 |
| E1         | 1.200      | 1.400 | 0.047     | 0.055 |
| e          | 0.950 BSC  |       | 0.037 BSC |       |
| L          | 0.300      | 0.500 | 0.012     | 0.020 |
| θ          | 0          | 8°    | 0         | 8°    |

»Marking



»Ordering information

| Order code       | Package | Base qty | Delivery mode |
|------------------|---------|----------|---------------|
| SM24CANB-02HTG-N | SOT-23  | 3k       | Tape and reel |

## 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 [Bourne](#) manufacturer:*

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#) [JANTX1N6053A](#)  
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD105-B1-02EL E6327](#) [ESD112-B1-02EL E6327](#)  
[ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#) [3.0SMCJ33CA-F](#)  
[3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [JANTX1N6126A](#) [JANTX1N6462](#) [JANTX1N6465](#) [USB50805e3/TR7](#) [D3V3Q1B2DLP3-7](#)  
[D55V0M1B2WS-7](#) [DRTR5V0U4SL-7](#) [SCM1293A-04SO](#) [ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [SM1605E3/TR13](#) [SMLJ45CA-TP](#) [CEN955](#)  
[W/DATA](#) [82350120560](#) [VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [D1213A-](#)  
[01LP4-7B](#) [ESD101-B1-02EL E6327](#) [824500181](#) [MMAD1108/TR13](#) [5KP100A](#) [5KP15A](#)