

Working Voltage: 3.3 V
Peak Pulse Power: 600 W

Surface Mount Transient Voltage Suppressors

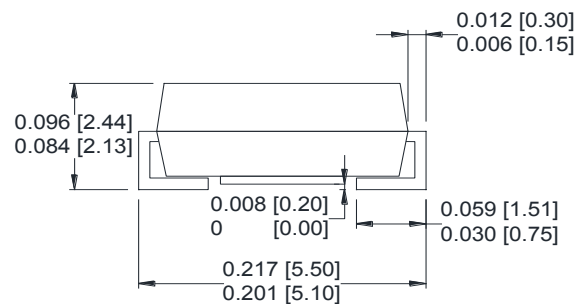
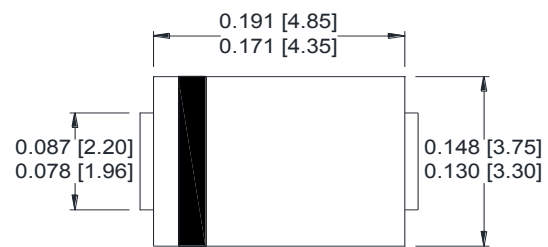
Features

- Glass passivated chip
- 600 W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate (duty cycle):0.01 %
- Low leakage
- Uni and Bidirectional unit
- Excellent clamping capability
- Very fast response time
- RoHS compliant

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

SMB/ DO-214AA



Dimensions: inch [mm]

Maximum Ratings($T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|----------------|--------------|------------------|
| Peak power dissipation with a 10/1000 μ s waveform ⁽¹⁾ | P_{PP} | 600 | W |
| Maximum clamping voltage @ $I_{PP} = 76.9\text{A}$ | V_C | 8 | V |
| Power dissipation on infinite heatsink at $T_L = 75^\circ\text{C}$ | P_D | 5.0 | W |
| Operating junction and storage temperature range | T_J, T_{STG} | - 55 to +150 | $^\circ\text{C}$ |
| Break down voltage @ $I_T = 10\text{ mA}$ | V_B | 5.2~6.0 | V |
| Maximum reverse leakage @ $V_R = 3.3\text{ V}$ | I_R | 800 | μA |
| Peak forward surge current, 8.3 ms single half sine-wave unidirectional only ⁽²⁾ | I_{FSM} | 100 | A |
| Maximum instantaneous forward voltage at 50 A for unidirectional only ⁽³⁾ | V_F | 3.5 | V |

Note:

(1)Non-repetitive current pulse per Fig.5 and derated above $T_A=25^\circ\text{C}$ per Fig.1

(2)Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

Ratings and Characteristics Curves ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

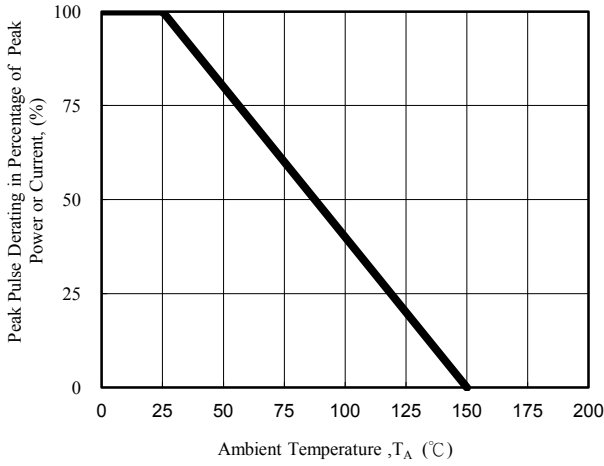


Fig. 1 - Pulse Derating Curve

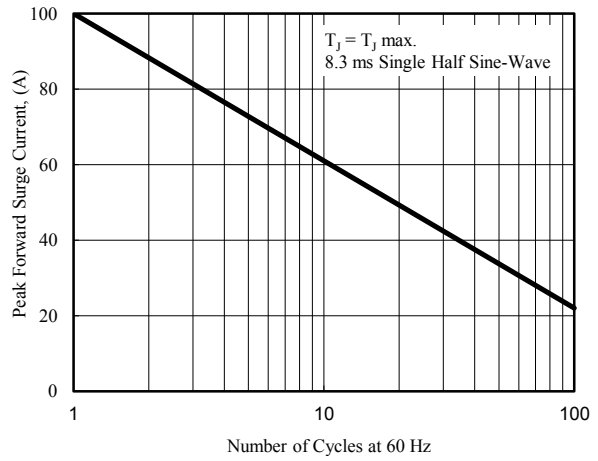


Fig. 2 - Maximum Non-Repetitive Surge Current

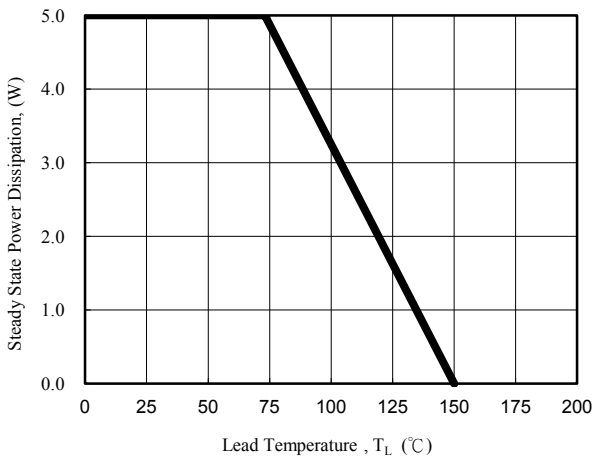


Fig. 3 - Steady State Power Derating Curve

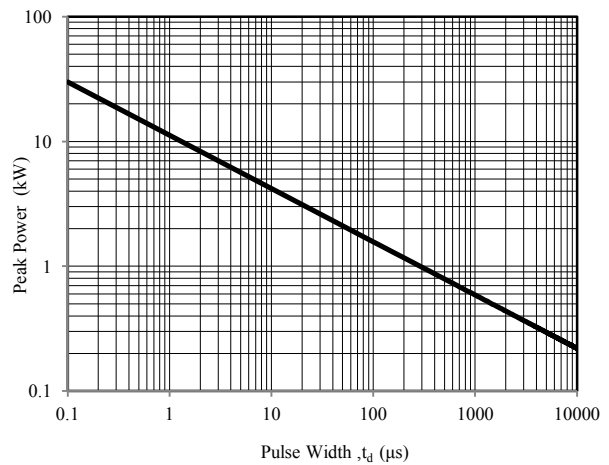


Fig. 4 - Peak Pulse Power Rating Curve

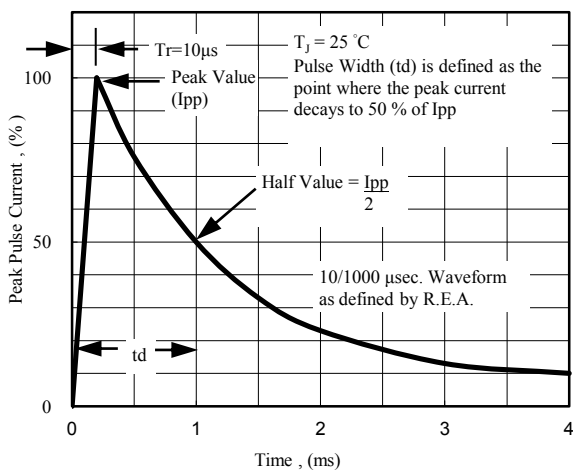


Fig. 5 - Pulse Waveform

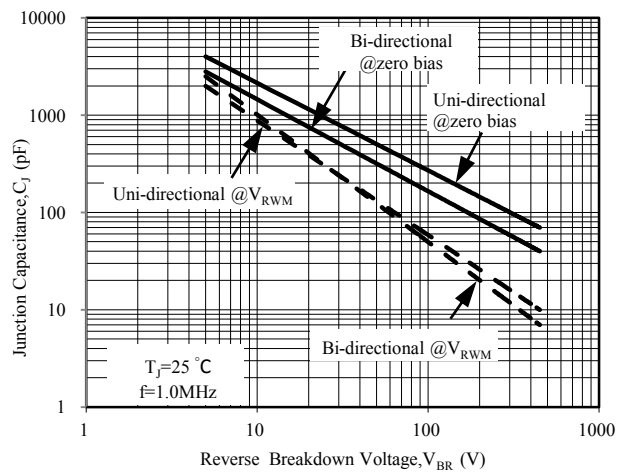


Fig. 6 - Typical Junction Capacitance