

Working Voltage: 3.3V
Peak Pulse Power: 200 W

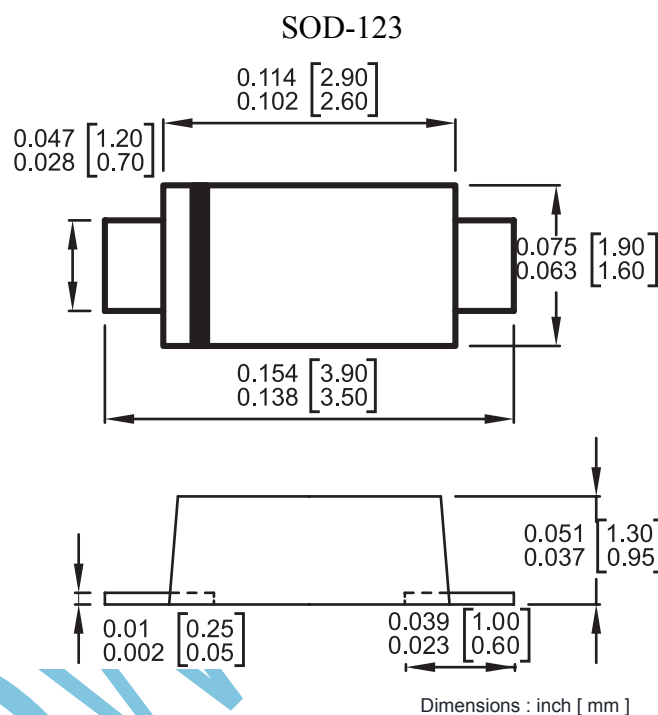
Surface Mount Transient Voltage Suppressors

Features

- Glass passivated chip
- 200 W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate (duty cycle):0.01 %
- Low leakage
- Unidirectional 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
- Device Marking Code: FD
- Mounting position: Any



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}	200	Watts
Breakdown voltage @ $I_T = 10\text{mA}$	V_{BR}	5.2-6.0	Volts
Working Peak Reverse Voltage	V_{RWM}	3.3	Volts
Maximum Reverse Leakage @ V_{RWM}	I_R	600	μ Amps.
Peak pulse current with a 10/1000 μ s waveform ⁽¹⁾	I_{PP}	25.0	Amps.
Maximum Clamping Voltage @ I_{PP}	V_c	8.0	Volts
Power dissipation on infinite heatsink at $T_L = 75^{\circ}\text{C}$	P_D	0.4	Watts
Peak forward surge current, 8.3 ms single half sine	I_{FSM}	20	Amps.
Maximum instantaneous forward voltage at 25 A	V_F	3.5	Volts
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^{\circ}\text{C}$

Note:

(1)Non-repetitive current pulse per Fig.3 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)

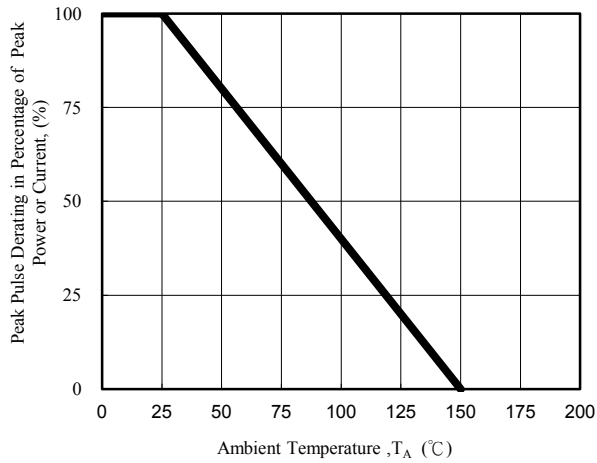


Fig. 1 - Pulse Derating Curve

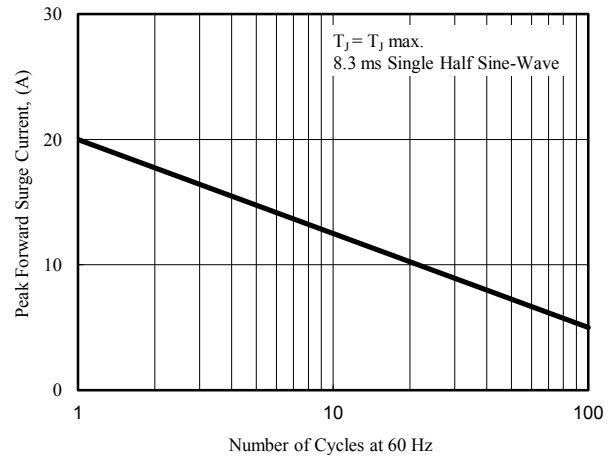


Fig. 2 - Maximum Non-Repetitive Surge Current

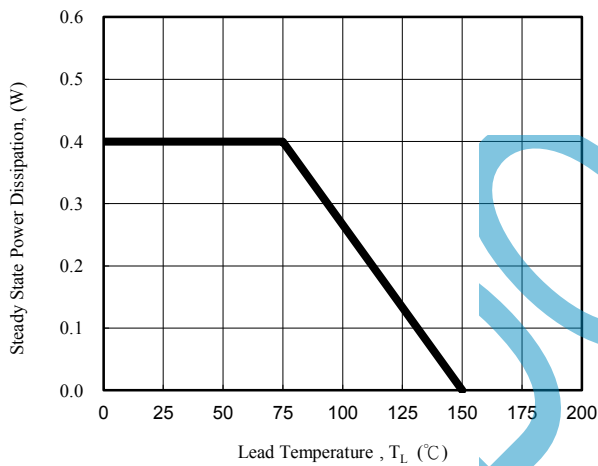


Fig. 3 - Steady State Power Derating Curve

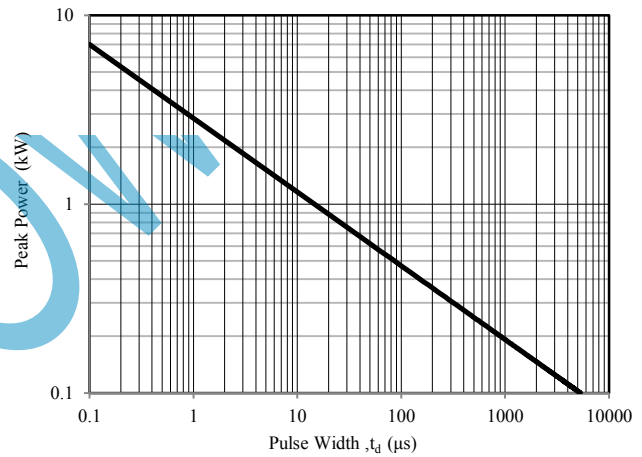


Fig. 4 - Steady State Power Derating Curve

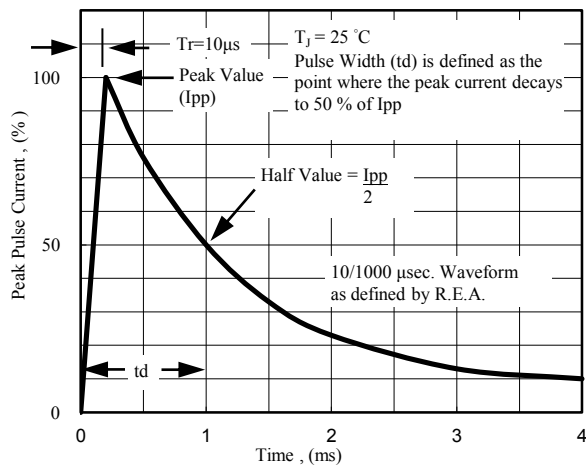


Fig. 5 - Pulse Waveform