

Features

- Glass passivated chip
- 200 W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

Mechanical Data

- Case: SOD123FL Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbols | Value | Unit |
|--|----------------|-------------|------|
| Peak power dissipation with a 10/1000 us waveform ⁽¹⁾ | P_{PP} | 200 | W |
| Peak pulse current with a 10/1000 us waveform ⁽¹⁾ | I_{PP} | 27.5 | A |
| Power dissipation on infinite heatsink at $T_L = 75\text{ }^\circ\text{C}$ | P_D | 1.0 | W |
| Peak forward surge current, 8.3 ms single half sinewave unidirectional only ⁽²⁾ | I_{FSM} | 30 | A |
| Maximum instantaneous forward voltage at 10 A for unidirectional only | V_F | 3.5 | V |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | °C |

Note:

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

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

Electrical Specification @ Tamb 25°C

| Part Number | | Reverse Stand-off Voltage | Breakdown Voltage $V_{BR} @ I_T$ | | Test Current | Max. Clamping Voltage @ I_{PP} | Max. Peak Pulse Current | Max. Reverse Leakage @ V_{RWM} |
|-------------|----------|---------------------------|----------------------------------|---------|--------------|----------------------------------|-------------------------|----------------------------------|
| UNI-POLAR | BI-POLAR | $V_{RWM}(V)$ | Min.(V) | Max.(V) | $I_T(mA)$ | $V_{C MAX.}(V)$ | $I_{PP}(A)$ | $I_R(\mu A)$ |
| SMF3.3A | SMF3.3CA | 3.30 | 4.10 | 5.10 | 10 | 7.3 | 27.5 | 500 |

Ratings and Characteristics Curves (TA=25°C unless otherwise noted)

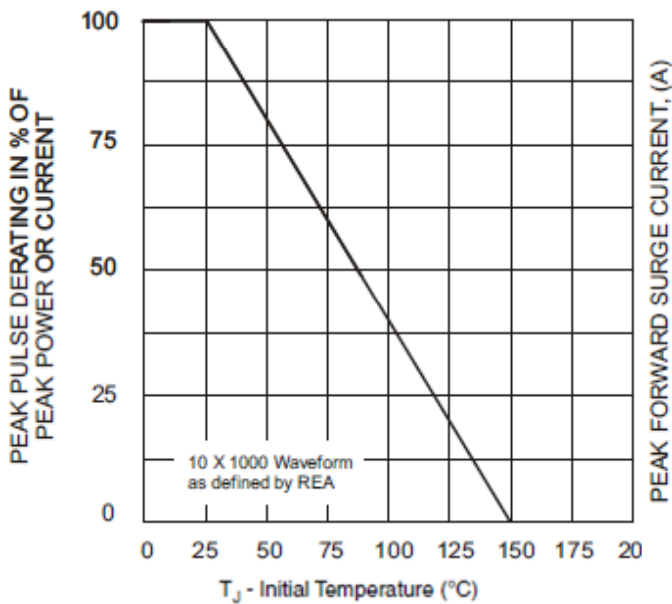


Fig. 1 - Pulse Derating Curve

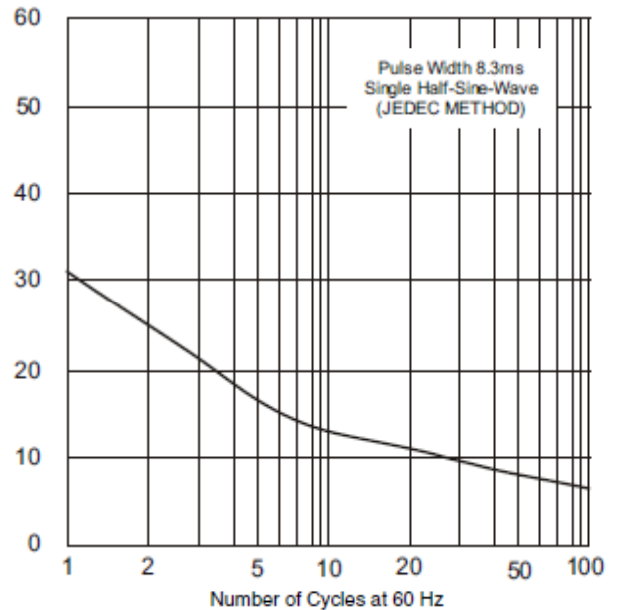


Fig. 2 - Maximum Non-Repetitive Surge Current

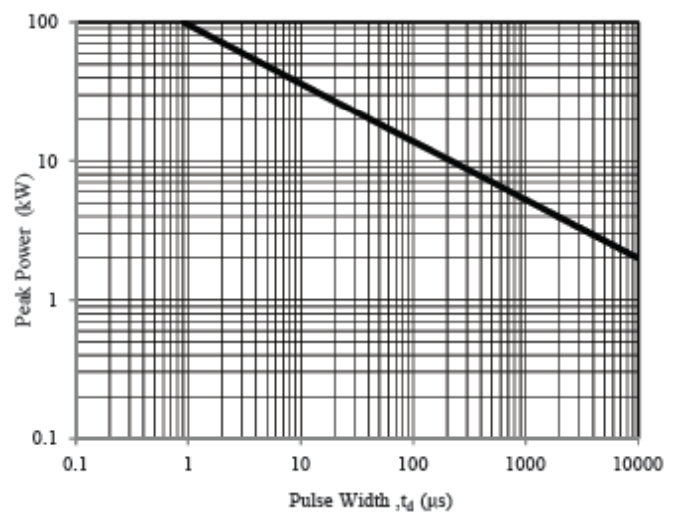
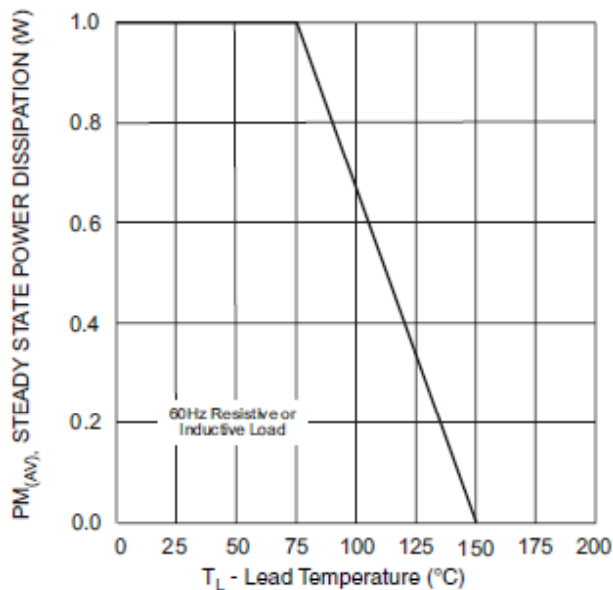


Fig. 3 - Steady State Power Derating Curve

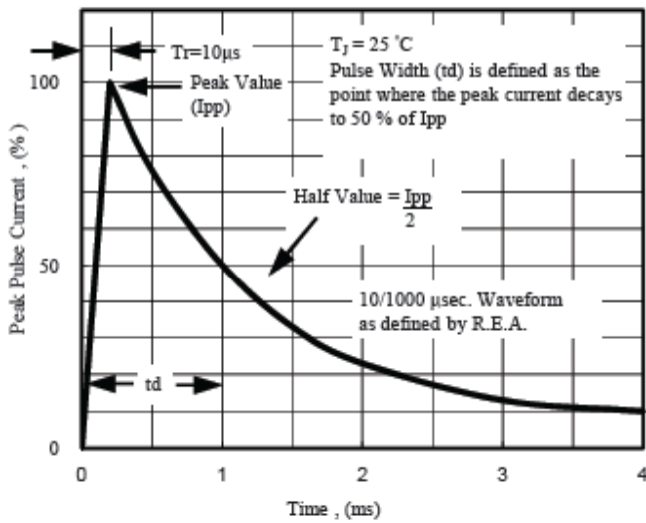


Fig. 5 - Pulse Waveform

Fig. 4 - Peak Pulse Power Rating Curve

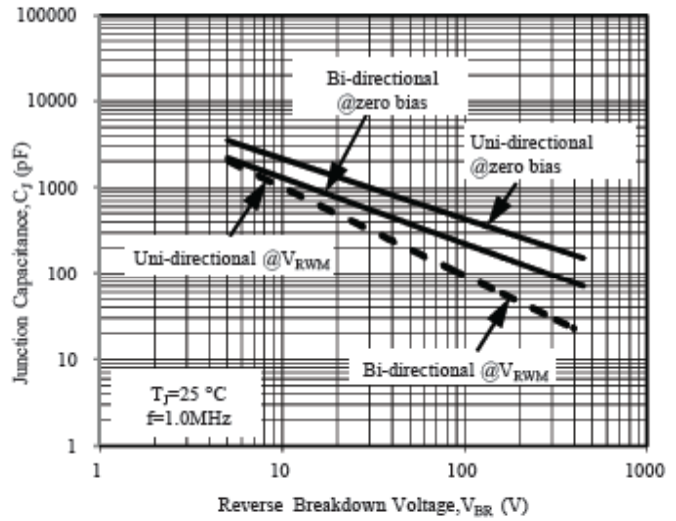


Fig. 6 - Typical Junction Capacitance

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 [Leiditech](#) 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](#) [SMQA1000T1G](#) [CEN955 W/DATA](#) [82350120560](#)
[VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [IP4042CX5/LF,135](#) [D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [1SMB33CAT3G-XYZ](#) [MMAD1108/TR13](#) [5KP100A](#) [5KP15A](#)