NR5.0SMDJ58CA

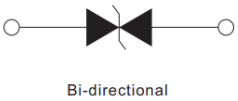
Description

The NR5.0SMDJ58CA C is designed for DC 48V

Features

- Glass passivated chip
- 5000 W peak pulse power capability with a 10/1000 μs waveform, repetitive rate (duty cycle):0.01 %
- Low leakage
- Bidirectional unit
- Excellent clamping capability
- Very fast response time
- Mounting position: Any
- IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact).
- 1.2/50μs-8/20μs 2ohm 2KV/1kA

Functional Diagram



Bi-directional

Maximum Ratings (TA=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000μs waveform[1]	P_{PK}	5000	Watts
Steady State Power Dissipation @ TL = 75 °C	P_D	6.5	Watts
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Note：

1. Non-repetitive current pulse per Fig.4 and derated above TA= 25 °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 Characteristics (TA = 25 °C unless otherwise noted)

Part Number (Bi)	Marking Bi	Reverse Stand off Voltage V_R (Volts)	Breakdown Voltage V_{BR} (Volts)@I_T Min .V	Breakdown Voltage V_{BR} (Volts)@I_T Max .V	Test Current I_T(mA)	Maximum Reverse Leakage I_R@ V_R(μA)	Maximum Peak Pulse Current Ipp (A)	Maximum Clamping Voltage V_C @ I_{pp} (V)	I_{PP} (A) 8/20μS	VC (A) 8/20μS
NR5.0SMDJ58CA	NR5BG	58	64.40	71.20	1	2	53.50	70	1000	85

Rating & Characteristic Curves

Figure 1- Pulse Derating Curve

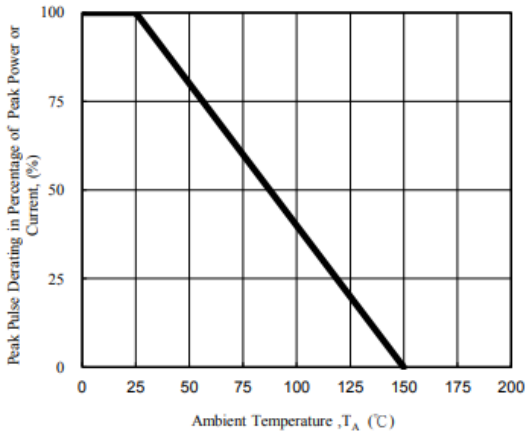


Figure 2- V-I Curve

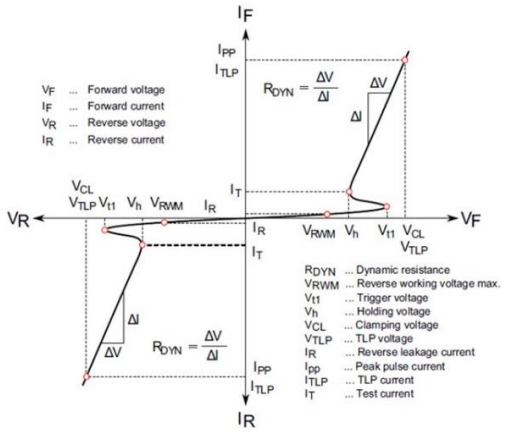


Figure 3- Steady State Power Derating Curve

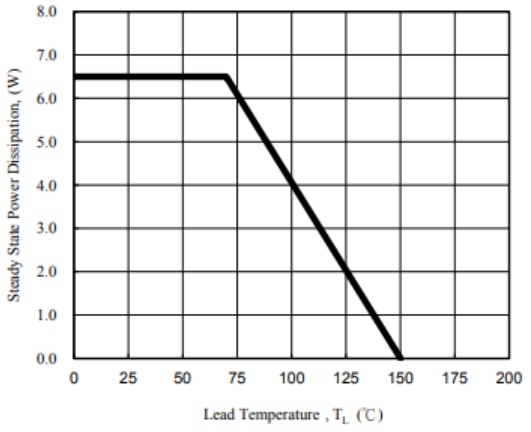
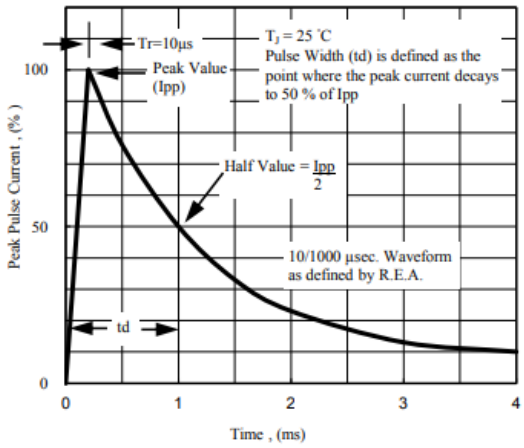
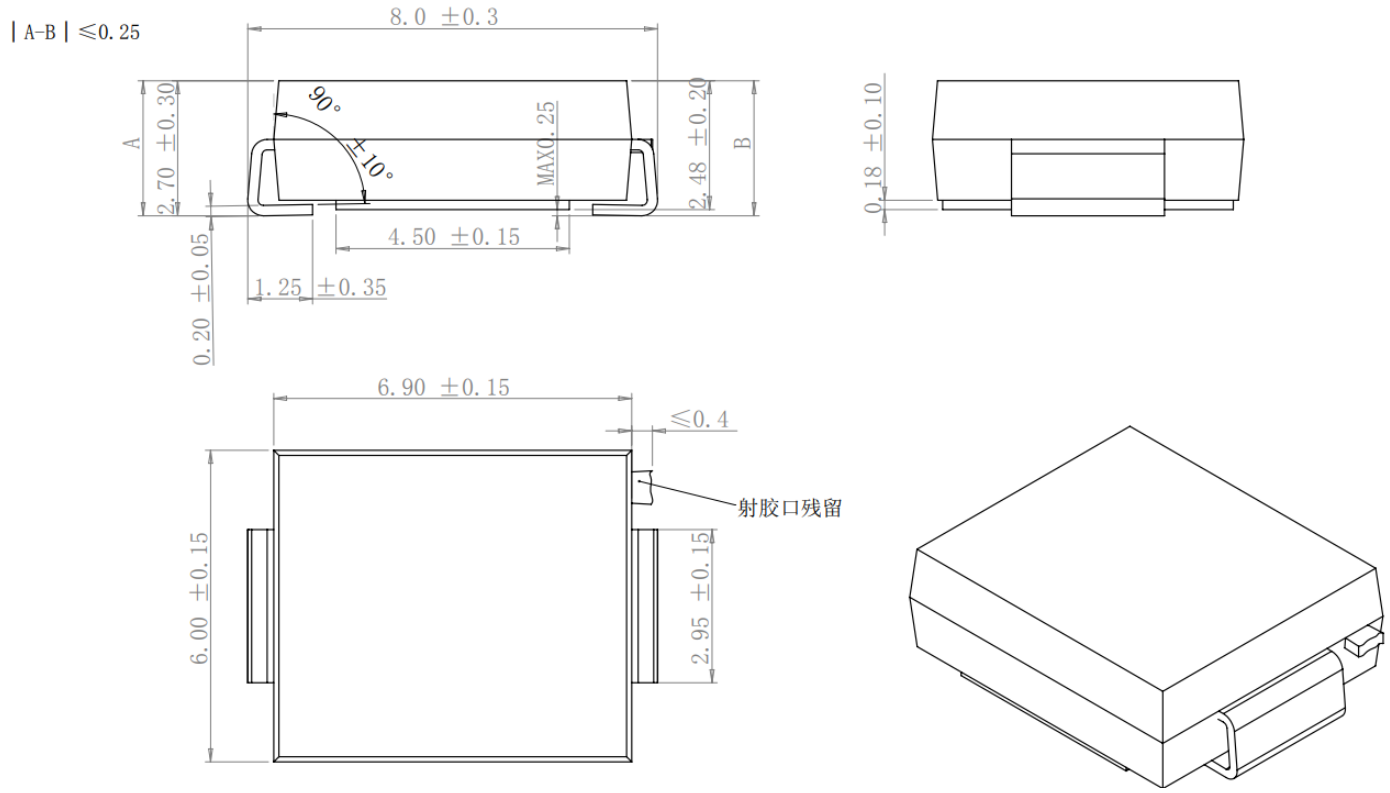


Figure 4- Pulse Waveform



PACKAGE OUTLINE DIMENSIONS (millimeters)



DO-214AB(smc)

Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.