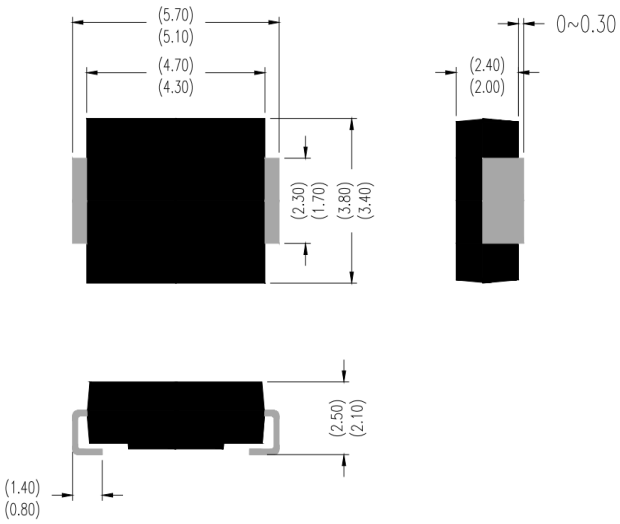
Features

- Glass passivated chip
- 600W peak pulse power capability with a 10/1000 μs waveform, repetitive rate (duty cycle):0.01%
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

SMB/DO-214AA

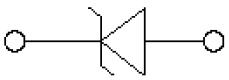


Dimensions: inch[mm]

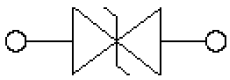
Mechanical Data

- Case: SMB/DO-214AA 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

Uni-directional



Bi-directional



Absolute Maximum Ratings (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000 us waveform (1)	P_{PP}	600	W
Peak pulse current wih a 10/1000 us waveform (1)	I_{PP}	75	A
Power dissipation on infinite heatsink at TL = 75 °C	P_D	5.0	W
Peak forward surge current, 8.3 ms single half sinewave unidirectional only(2)	I_{FSM}	100	A
Maximum instantaneous forward voltage at 10 A for unidirectional only	V_F	3.5/5.0	V
Operating junction and storage temperature range	T_J , T_{STG}	-55 to +150	℃

Note:

1)Non-repetitive current pulse per Fig.5 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 (T_A=25℃ unless otherwise noted)

Part Number		Device Marking Code		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	UNI	BI	V_{RWM}(V)	Min.(V)	Max.(V)	I_T(mA)	V_C MAX.(V)	I_{PP}(A)	I_R(uA)
SMBJ3.3A	SMBJ3.3CA	KC	DL	3.3	5.20	6.50	10	8.0	75.0	600

■ Ratings and Characteristics Curves （T_A = 25℃ unless otherwise noted)

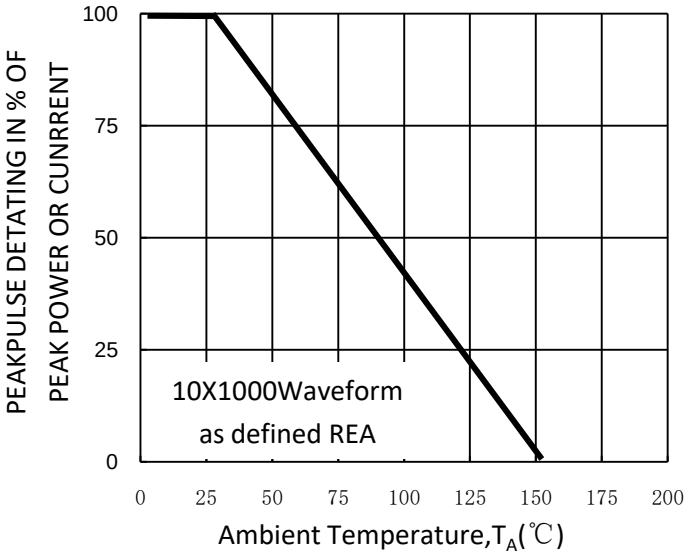


Fig. 1-Pulse Derating Curve

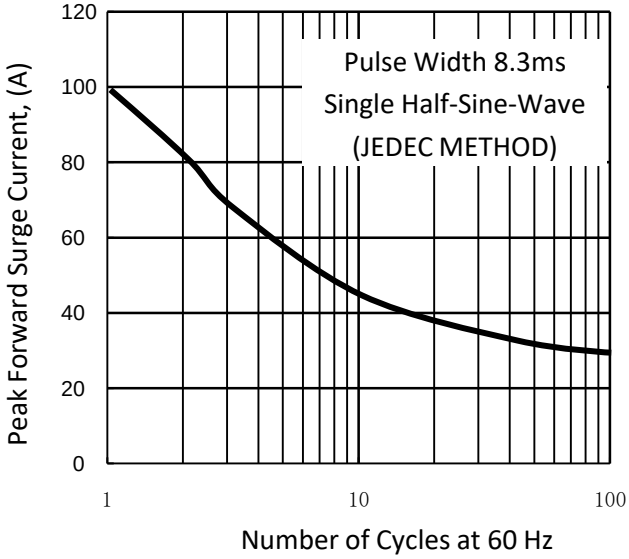


Fig. 2-Maxmum Non-Repetitive Surge Current

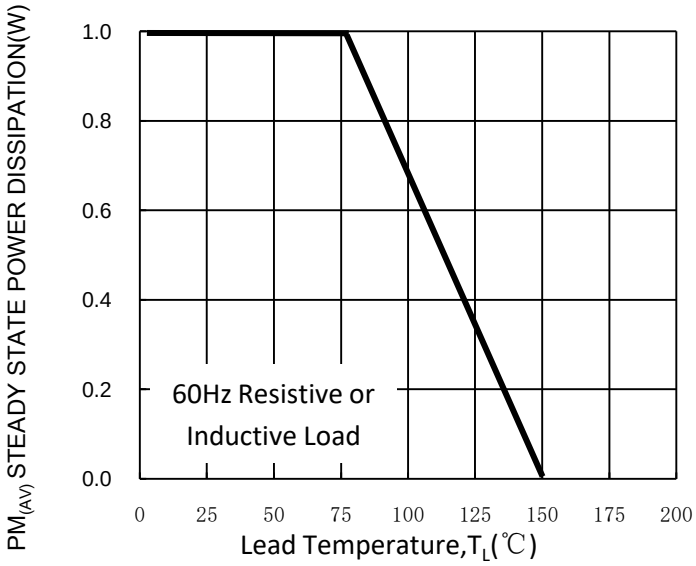


Fig. 3-Steady State Power Derating Curve

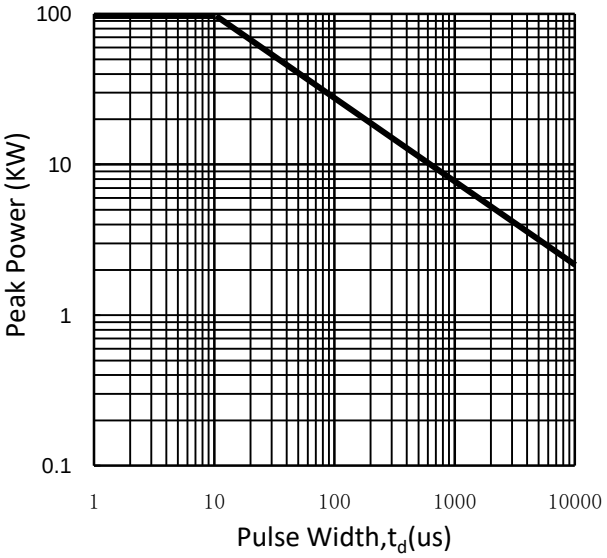


Fig. 4-Peak Pulse Power Rating Curve

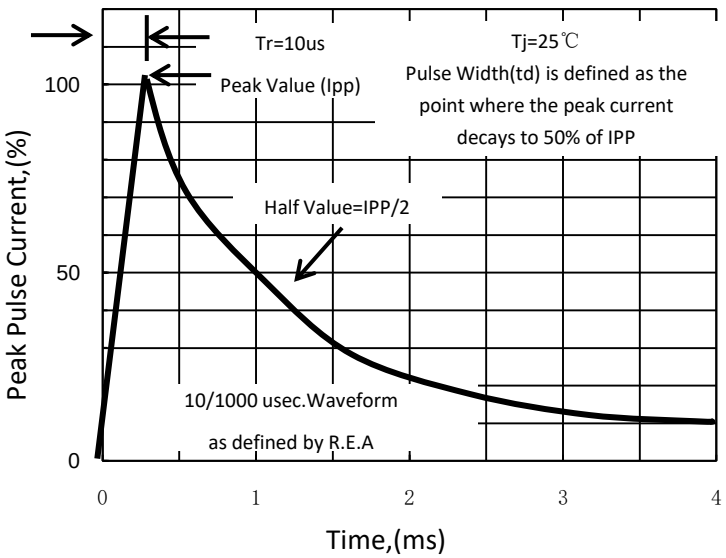


Fig. 5-Pulse Waveform

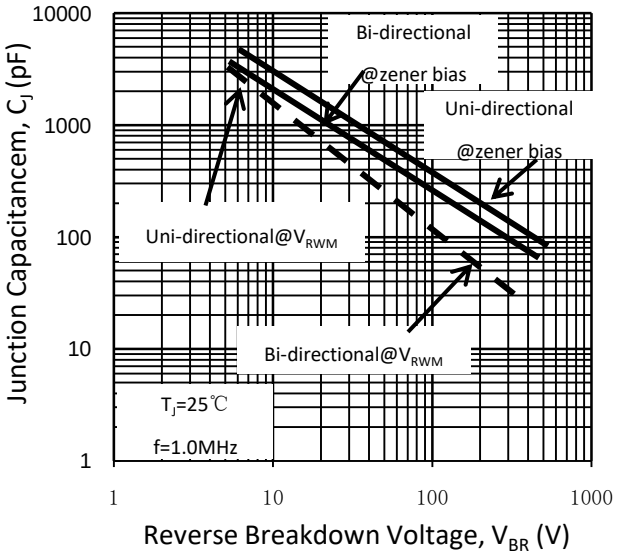


Fig. 6-Typical Junction Capacitance