



SMBJ5.0AT-01L

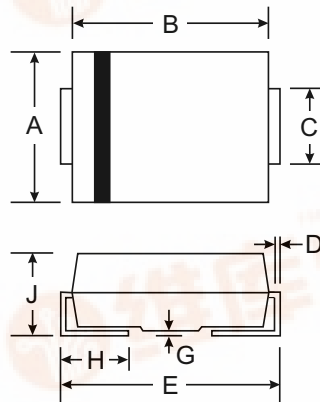
600W SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Features

- 600W Peak Pulse Power Dissipation
- 5.0V Standoff Voltage
- Glass Passivated Die Construction
- Excellent Clamping Capability
- Fast Response Time
- Plastic Material - UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SMB, Transfer Molded Epoxy
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity Indicator: Cathode Band
- Marking: Date Code and Marking Code
- Weight: 0.1 grams (approx.)



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation (Non repetitive current pulse derated above $T_A = 25^\circ\text{C}$) (Note 1)	P_{PK}	600	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) (Notes 1, 2)	I_{FSM}	100	A
Instantaneous Forward Voltage @ $I_{PP} = 35\text{A}$ (Notes 1, 2)	V_F	3.5	V
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Notes: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured with 8.3ms single half sine-wave. Duty cycle = 4 pulses per minute maximum.

Part Number	Reverse Standoff Voltage	Breakdown Voltage V_{BR} @ I_T (Note 3)		Test Current	Max. Reverse Leakage @ V_{RWM}	Max. Clamping Voltage @ I_{PP}	Max. Peak Pulse Current I_{PP}	Marking Code	
	V_{RWM} (V)	Min (V)	Max (V)	I_T (mA)	I_R (μA)	V_C (V)	(A)	BI-	UNI-
SMBJ5.0A	5.0	6.40	7.23	10	100	9.2	65.2		KE

Notes: 3. V_{BR} measured with I_T current pulse = 300 μs .

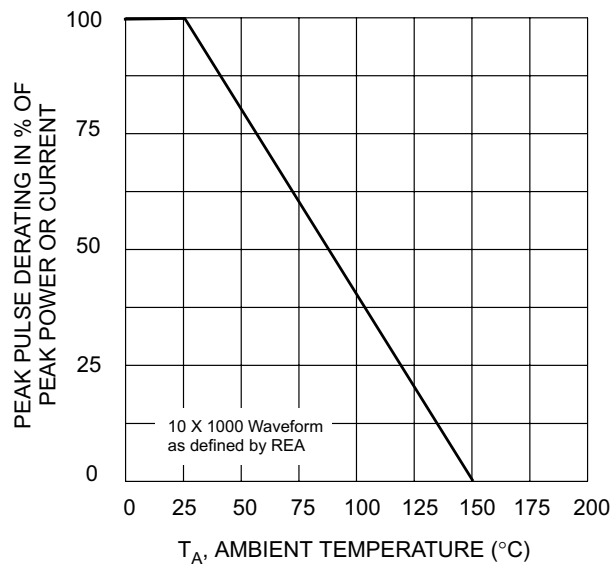


Fig. 1 Pulse Derating Curve

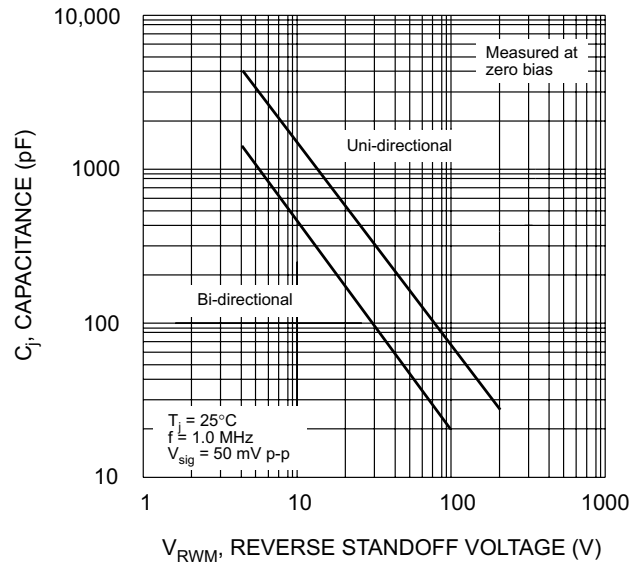


Fig. 2 Typical Junction Capacitance

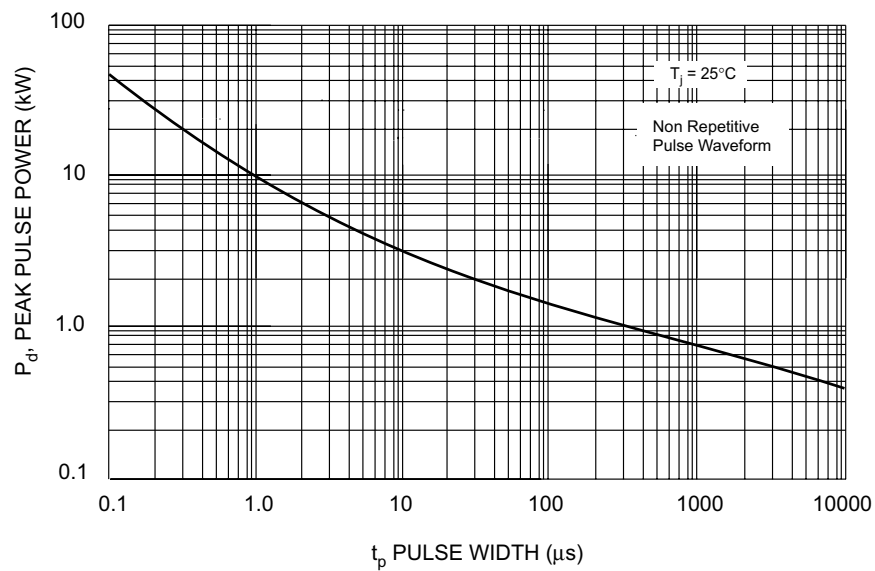


Fig. 3 Pulse Rating Curve

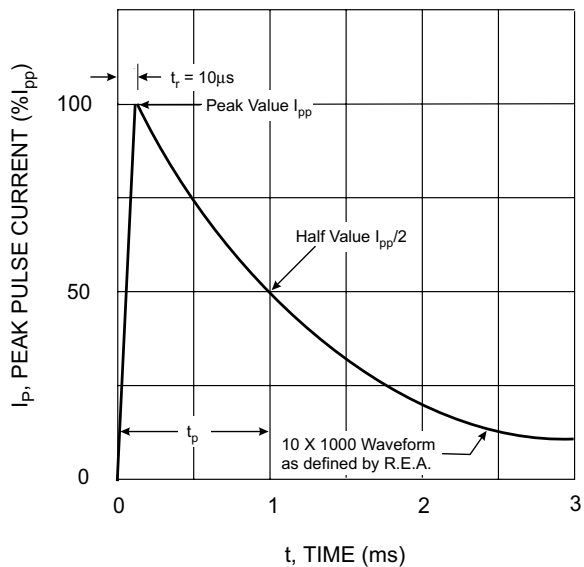


Fig. 4 Pulse Waveform