

TRANSIENT VOLTAGE SUPPRESSOR

FEATURE

- ✧ Plastic package.
- ✧ Glass passivated chip junction in SMB Package
- ✧ Excellent clamping capability.
- ✧ Low zener impedance.
- ✧ 600W peak pulse power capability on 10/1000µs waveform.
- ✧ Typical IR less than 1µA above 13V.
- ✧ Fast response time: typically less than 1.0ps from 0 Volts to BV min.
- ✧ High temperature soldering guaranteed: 265°C/10 seconds

MECHANICAL DATE

- ✧ Case: JEDEC SMB Molded Plastic.
- ✧ Terminals: Axial leads, solderable per MIL-STD-750, Method 2026.
- ✧ Polarity: Color band denoted cathode except bidirectional.
- ✧ Mounting Position: Any.

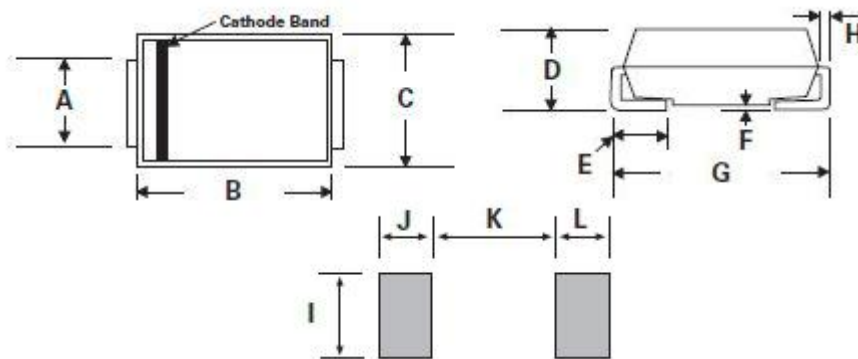
MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000us waveform (Notel, Fig. 1).	P _{PPM}	Minimum 600	Watts
Peak Pulse Current of on 10/1000us waveform. (Notel, Fig. 3)	I _{PPM}	See Table	Amps
Steady State Power Dissipation at TL =75°C, Lead lengths. 375", (9.5mm) (Fig. 5).	P _{M(AV)}	5.0	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 2, Fig. 6).	I _{FSM}	100	Amps
Operating junction and Storage Temperature Range.	T _J , T _{STG}	-55 to +150	°C

Notes:

1. Non-repetitive current pulse, per Fig. 3 and derated above TA = 25°C per Fig. 2.
2. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.



Item	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.95	2.2	0.077	0.086
B	4.06	4.57	0.16	0.18
C	3.3	3.94	0.13	0.155
D	2.13	2.44	0.084	0.096
E	0.76	1.52	0.03	0.06
F	-	0.203	-	0.008
G	5.21	5.59	0.205	0.22
H	0.152	0.305	0.006	0.012
I	2.26	-	0.089	-
J	2.16	-	0.085	-
K	-	2.74	-	0.107
L	2.16	-	0.085	-

ELECTRICAL CHARACTERISTICS

Part Number	Marking	Reverse Stand-Off Voltage	Breakdown Voltage NIN.@IT	Breakdown Voltage MAX.@IT	Reverse Leakage @VRWM	Test Current	Peak Pulse Current	Maximum Clamping Voltage
		VR(V)	VBL(V)	VBH(V)	IR(uA)	IT(mA)	IPP(A)	VCH(V)
KSMBJ6.8CA-E3/52	AK	6.8	7.22	7.98	500	10	53.6	11.2

RATINGS AND CHARACTERISTIC CURVES (TA=25°C unless otherwise noted)

Figure 1 - Peak Pulse Power Rating Curve

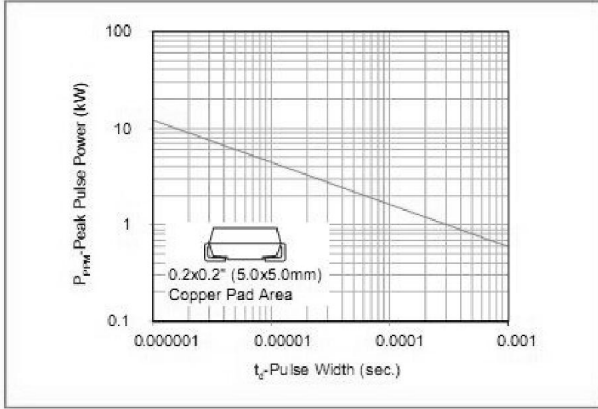


Figure 2 - Pulse Derating Curve

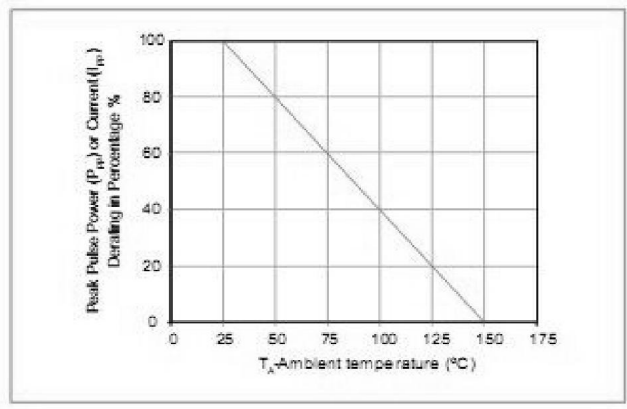


Figure 3 - Pulse Waveform

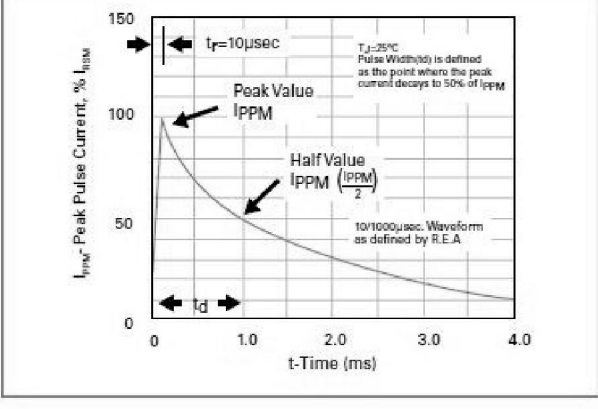


Figure 4 - Typical Junction Capacitance Uni-Directional

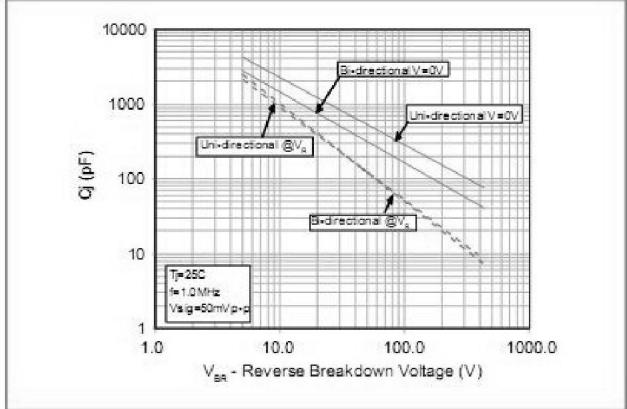


Figure 5 - Steady State Power Dissipation Derating Curve

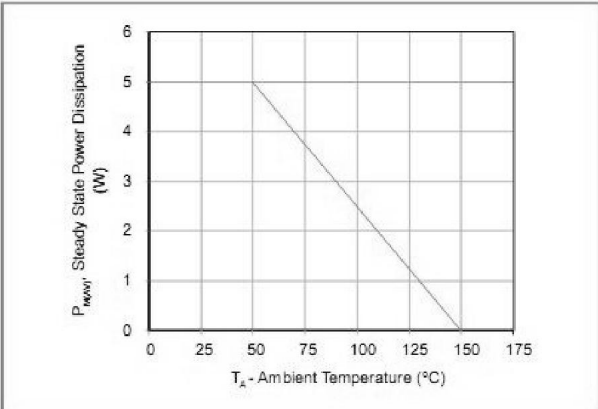


Figure 6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Only

