

## TRANSIENT VOLTAGE SUPPRESSOR

### FEATURE

- ✧ Plastic package.
- ✧ Glass passivated chip junction in SMA Package
- ✧ Excellent clamping capability.
- ✧ Low zener impedance.
- ✧ 400W 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 SMA Molded Plastic.
- ✧ Terminals: Axial leads, solderable per MIL-STD-750, Method 2026.
- ✧ Polarity: Color band denoted cathode except bidirectional.
- ✧ Mounting Position: Any.

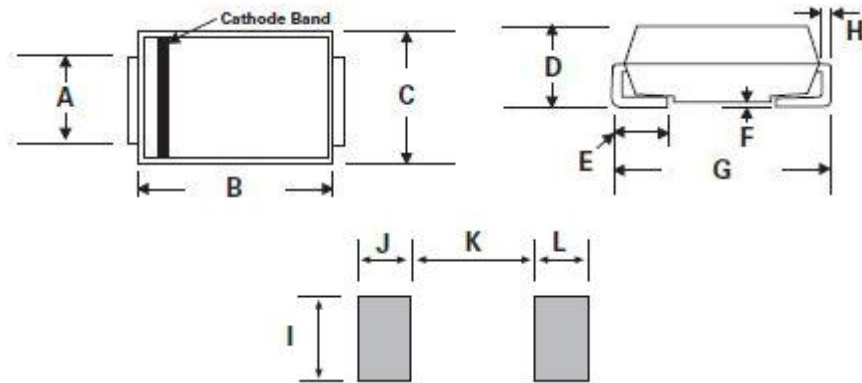
### MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Peak Pulse Power Dissipation on 10/1000us waveform (Notel, Fig.1).	P <sub>PPM</sub>	Minimum 400	Watts
Peak Pulse Current of on 10/1000us waveform. (Notel, Fig.3)	I <sub>PPM</sub>	See Table	Amps
Steady State Power Dissipation at TL =75°C, Lead lengths. 375", (9.5mm) (Fig.5).	P <sub>M(AV)</sub>	3.3	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 2, Fig.6).	I <sub>FPM</sub>	40	Amps
Operating junction and Storage Temperature Range.	T <sub>J</sub> , T <sub>STG</sub>	-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.



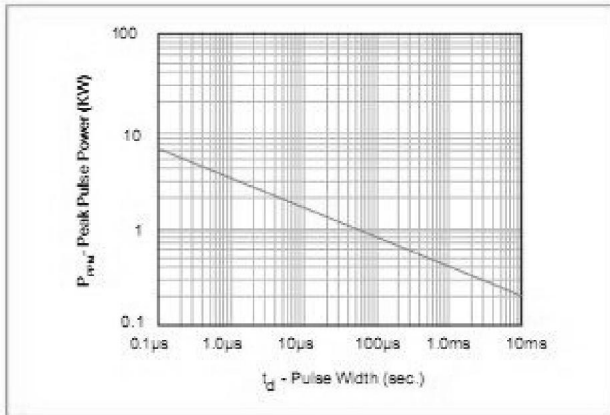
A	1.25	1.65	0.049	0.065
B	3.99	4.5	0.157	0.177
C	2.54	2.79	0.1	0.11
D	1.98	2.29	0.078	0.09
E	0.78	1.52	0.03	0.06
F	-	0.203	-	0.008
G	4.93	5.28	0.194	0.208
H	0.152	0.305	0.006	0.012
I	1.8	-	0.07	-
J	2.1	-	0.082	-
K	-	2.3	-	0.09
L	2.1	-	0.082	-

## ELECTRICAL CHARACTERISTICS

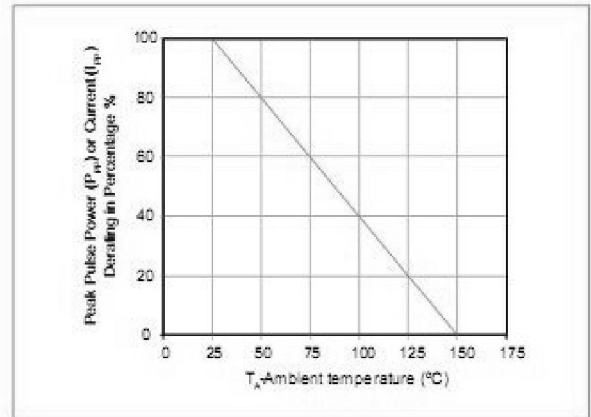
Part Number	Marking	Reverse Stand-Off Voltage	Breakdown Voltage NIN.@IT	Breakdown Voltage MAX.@IT	Reverse Leakage @VRWM	Test Current	Peak Pulse Current	Maximum Clamping Voltage @IPP
		VR(V)	VBL(V)	VBH(V)	IR(uA)	IT(mA)	IPP(A)	VCH(V)
KSMAJ6.8CA-E3/61	<b>WK</b>	6.5	7.22	7.98	500	10	35.7	11.2

**RATINGS AND CHARACTERISTIC CURVES** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

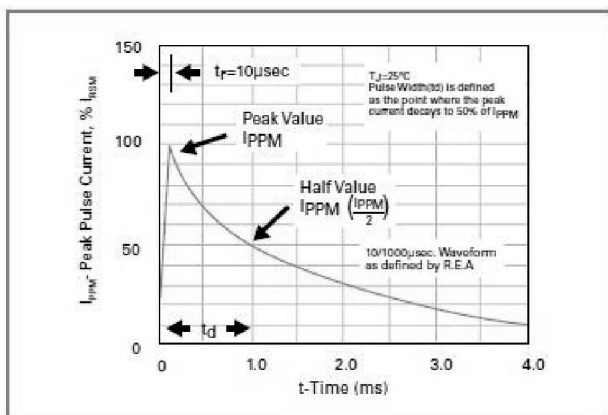
**Figure 1 - Peak Pulse Power Rating Curve**



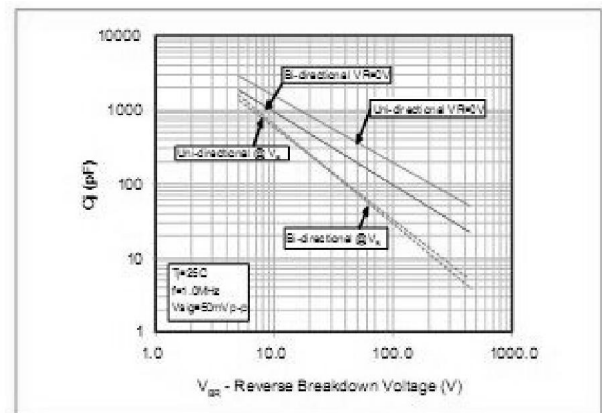
**Figure 2 - Pulse Derating Curve**



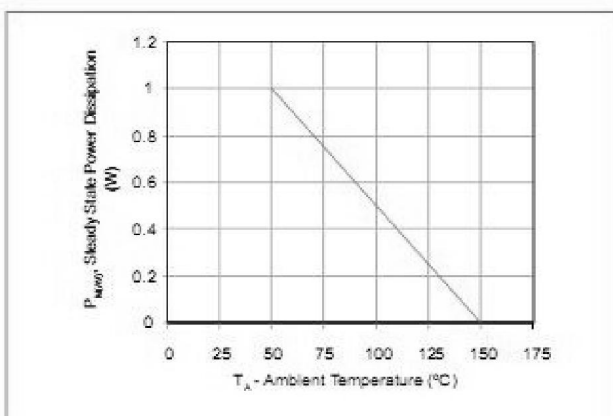
**Figure 3 - Pulse Waveform**



**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**

