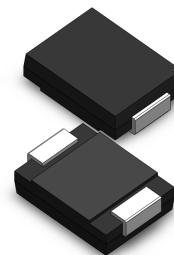


VOLTAGE RANGE: 22- 78V

POWER: 3000Watts

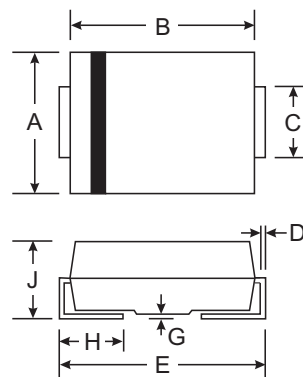
Features

- Glass Passivated Die Construction
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000μS Waveform (Note 1, 2) Figure 3	PPPM	3000	W
Peak Pulse Current on 10/1000μS Waveform (Note 1) Figure 4	IPPM	See Table 1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note 2, 3)	IFSM	100	A
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Note: 1. Non-repetitive current pulse, per Figure 4 and derated above T_A = 25°C per Figure 1.

2. Mounted on 8.0mm² copper pads to each terminal.

3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum.

ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

TYPE	Breakdown Voltage Min. @ I_T	Breakdown Voltage Max. @ I_T	Test Current	Reverse Stand-Off Voltage	Reverse Leakage @ V_{RWM}	Peak Pulse Current	Maximum Clamping Voltage @ I_{PP}
	$V_{BR\ MIN}(V)$	$V_{BR\ MAX}(V)$	$I_T\ (mA)$	$V_{RWM}(V)$	$I_R(\mu A)$	$I_{PP}(A)$	$V_C(V)$
SMC3K22CA	24.4	26.9	1.0	22	2.0	84.5	35.5
SMC3K24CA	26.7	29.5	1.0	24	2.0	77.1	38.9
SMC3K26CA	28.9	31.9	1.0	26	2.0	71.3	42.1
SMC3K28CA	31.1	34.4	1.0	28	2.0	66.1	45.4
SMC3K30CA	33.3	36.8	1.0	30	2.0	62.0	48.4
SMC3K33CA	36.7	40.6	1.0	33	2.0	56.3	53.3
SMC3K36CA	40.0	44.2	1.0	36	2.0	51.6	58.1
SMC3K40CA	44.4	49.1	1.0	40	2.0	46.5	64.5
SMC3K43CA	47.8	52.8	1.0	43	2.0	43.2	69.4
SMC3K45CA	50.0	55.3	1.0	45	2.0	41.3	72.7
SMC3K48CA	53.3	58.9	1.0	48	2.0	38.8	77.4
SMC3K51CA	56.7	62.7	1.0	51	2.0	36.4	82.4
SMC3K54CA	60.0	66.3	1.0	54	2.0	34.4	87.1
SMC3K58CA	64.4	71.2	1.0	58	2.0	32.1	93.6
SMC3K60CA	66.7	73.7	1.0	60	2.0	31.0	96.8
SMC3K64CA	71.1	78.6	1.0	64	2.0	29.1	103
SMC3K70CA	77.8	86.0	1.0	70	2.0	26.5	113
SMC3K75CA	83.3	92.1	1.0	75	2.0	24.8	121
SMC3K78CA	86.7	95.8	1.0	78	2.0	23.8	126

Notes

- Pulse test: $t_p \leq 50\text{ ms}$
- Surge current waveform per fig. 3 and derated per fig.2
- All terms and symbols are consistent with ANSI/IEEE C62.35

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

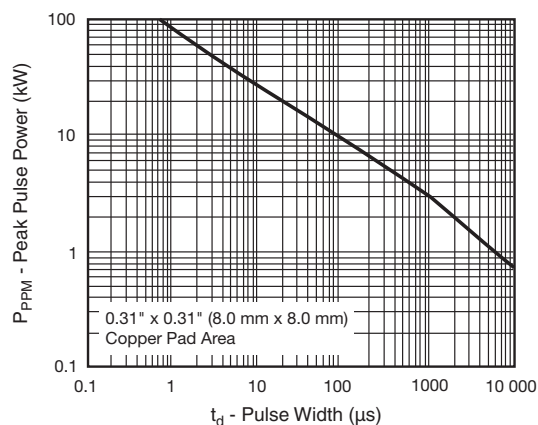


Fig. 1 - Peak Pulse Power Derating Curve

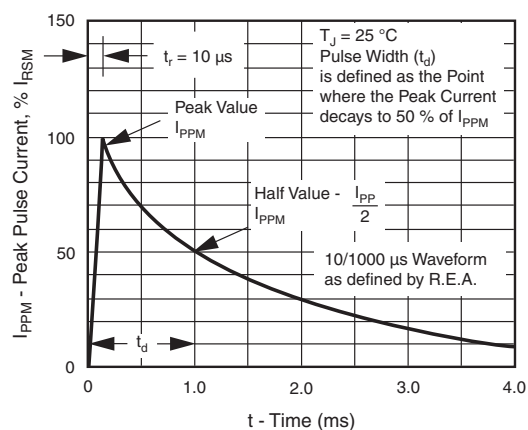


Fig. 3 - Pulse Waveform

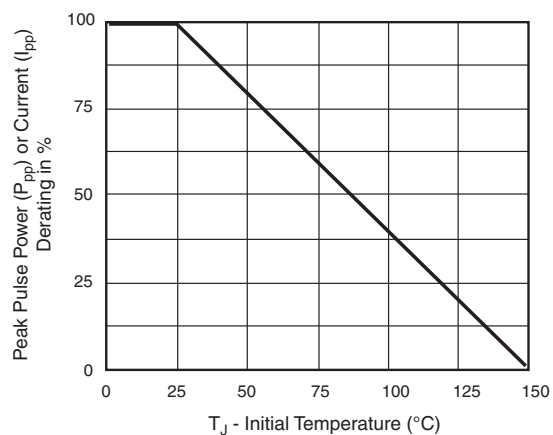


Fig. 2 - Pulse Power or Current vs. Initial Junction Temperature

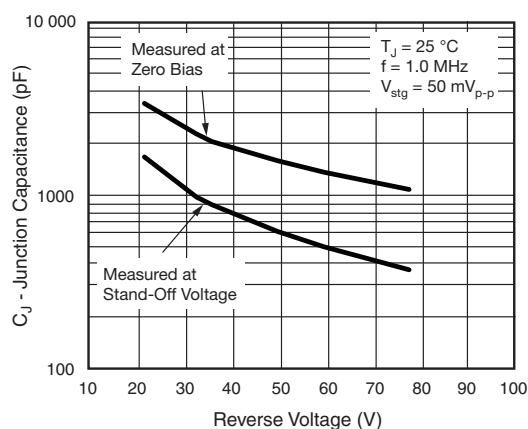


Fig. 4 - Typical Junction Capacitance