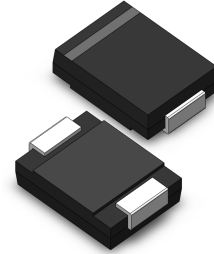


**VOLTAGE RANGE: 5.0 - 170V**  
**POWER: 3000Watts**

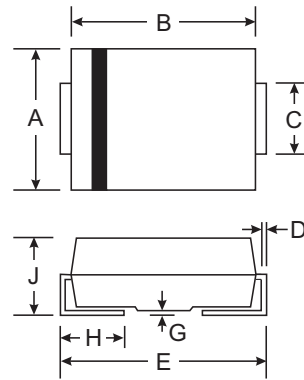
### Features

- 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-0



### Mechanical Data

- Case: DO-214AB(SMC)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208
- Marking: Date Code and Marking Code See Page 2
- Weight: 0.21 grams (approximate)



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

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000 $\mu\text{S}$ Waveform (Note 1, 2) Figure 3	PPPM	3000	W
Peak Pulse Current on 10/1000 $\mu\text{S}$ 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	$^\circ\text{C}$

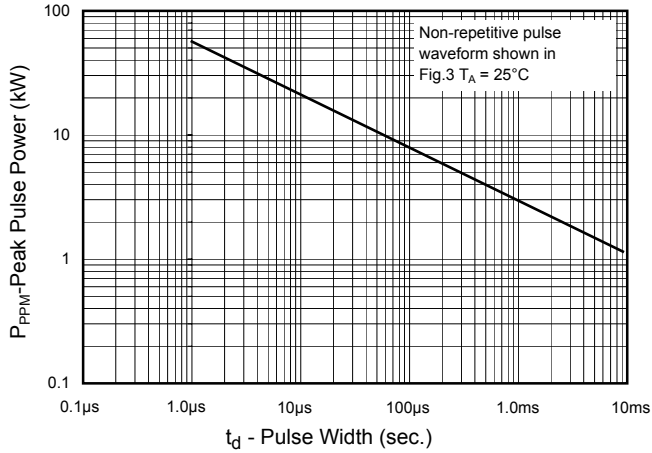
- Note: 1. Non-repetitive current pulse, per Figure 4 and derated above  $T_A = 25^\circ\text{C}$  per Figure 1.  
 2. Mounted on 8.0mm<sup>2</sup> copper pads to each terminal.  
 3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum.



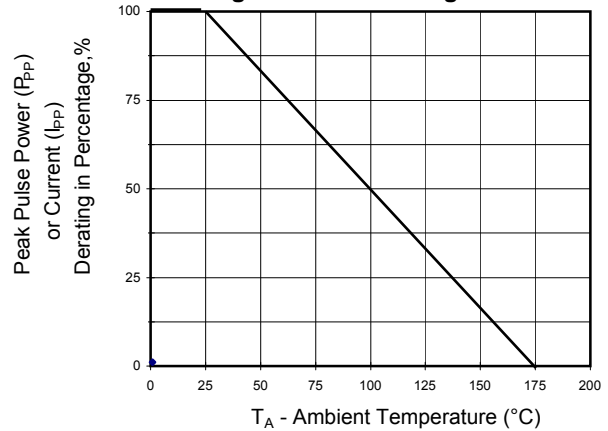
TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I <sub>T</sub>	Breakdown Voltage Max. @ I <sub>T</sub>	Test Current	Maximum Clamping Voltage @I <sub>PP</sub>	Peak Pulse Current	Reverse Leakage @V <sub>RWM</sub>
(Uni)	(Bi)	V <sub>RWM</sub> (V)	V <sub>BR MIN</sub> (V)	V <sub>BR MAX</sub> (V)	I <sub>T</sub> (mA)	V <sub>C</sub> (V)	I <sub>PP</sub> (A)	I <sub>R</sub> ( $\mu$ A)
3.0SMCJ5.0A	3.0SMCJ5.0CA	5.00	6.40	7.00	10	9.2	326.1	800
3.0SMCJ6.0A	3.0SMCJ6.0CA	6.00	6.67	7.37	10	10.3	291.3	800
3.0SMCJ6.5A	3.0SMCJ6.5CA	6.50	7.22	7.98	10	11.2	267.9	500
3.0SMCJ7.0A	3.0SMCJ7.0CA	7.00	7.78	8.60	10	12.0	250.0	200
3.0SMCJ7.5A	3.0SMCJ7.5CA	7.50	8.33	9.21	1	12.9	232.6	100
3.0SMCJ8.0A	3.0SMCJ8.0CA	8.00	8.89	9.83	1	13.6	220.6	50
3.0SMCJ8.5A	3.0SMCJ8.5CA	8.50	9.44	10.40	1	14.4	208.3	20
3.0SMCJ9.0A	3.0SMCJ9.0CA	9.00	10.00	11.10	1	15.4	194.8	10
3.0SMCJ10A	3.0SMCJ10CA	10.00	11.10	12.30	1	17.0	176.5	5
3.0SMCJ11A	3.0SMCJ11CA	11.00	12.20	13.50	1	18.2	164.8	5
3.0SMCJ12A	3.0SMCJ12CA	12.00	13.30	14.70	1	19.9	150.8	5
3.0SMCJ13A	3.0SMCJ13CA	13.00	14.40	15.90	1	21.5	139.5	5
3.0SMCJ14A	3.0SMCJ14CA	14.00	15.60	17.20	1	23.2	129.3	5
3.0SMCJ15A	3.0SMCJ15CA	15.00	16.70	18.50	1	24.4	123.0	5
3.0SMCJ16A	3.0SMCJ16CA	16.00	17.80	19.70	1	26.0	115.4	5
3.0SMCJ17A	3.0SMCJ17CA	17.00	18.90	20.90	1	27.6	108.7	5
3.0SMCJ18A	3.0SMCJ18CA	18.00	20.00	22.10	1	29.2	102.7	5
3.0SMCJ20A	3.0SMCJ20CA	20.00	22.20	24.50	1	32.4	92.6	5
3.0SMCJ22A	3.0SMCJ22CA	22.00	24.40	26.90	1	35.5	84.5	5
3.0SMCJ24A	3.0SMCJ24CA	24.00	26.70	29.50	1	38.9	77.1	5
3.0SMCJ26A	3.0SMCJ26CA	26.00	28.90	31.90	1	42.1	71.3	5
3.0SMCJ28A	3.0SMCJ28CA	28.00	31.10	34.40	1	45.4	66.1	5
3.0SMCJ30A	3.0SMCJ30CA	30.00	33.30	36.80	1	48.4	62.0	5
3.0SMCJ33A	3.0SMCJ33CA	33.00	36.70	40.60	1	53.3	56.3	5
3.0SMCJ36A	3.0SMCJ36CA	36.00	40.00	44.20	1	58.1	51.6	5
3.0SMCJ40A	3.0SMCJ40CA	40.00	44.40	49.10	1	64.5	46.5	5
3.0SMCJ43A	3.0SMCJ43CA	43.00	47.80	52.80	1	69.4	43.2	5
3.0SMCJ45A	3.0SMCJ45CA	45.00	50.00	55.30	1	72.7	41.3	5
3.0SMCJ48A	3.0SMCJ48CA	48.00	53.30	58.90	1	77.4	38.8	5
3.0SMCJ51A	3.0SMCJ51CA	51.00	56.70	62.70	1	82.4	36.4	5
3.0SMCJ54A	3.0SMCJ54CA	54.00	60.00	66.30	1	87.1	34.4	5
3.0SMCJ58A	3.0SMCJ58CA	58.00	64.40	71.20	1	93.6	32.1	5
3.0SMCJ60A	3.0SMCJ60CA	60.00	66.70	73.70	1	96.8	31.0	5
3.0SMCJ64A	3.0SMCJ64CA	64.00	71.10	78.60	1	103.0	29.1	5
3.0SMCJ70A	3.0SMCJ70CA	70.00	77.80	86.00	1	113.0	26.5	5
3.0SMCJ75A	3.0SMCJ75CA	75.00	83.30	92.10	1	121.0	24.8	5
3.0SMCJ78A	3.0SMCJ78CA	78.00	86.70	95.80	1	126.0	23.8	5
3.0SMCJ85A	3.0SMCJ85CA	85.00	94.40	104.00	1	137.0	21.9	5
3.0SMCJ90A	3.0SMCJ90CA	90.00	100.00	111.00	1	146.0	20.5	5
3.0SMCJ100A	3.0SMCJ100CA	100.00	111.00	123.00	1	162.0	18.5	5
3.0SMCJ110A	3.0SMCJ110CA	110.00	122.00	135.00	1	177.0	16.9	5
3.0SMCJ120A	3.0SMCJ120CA	120.00	133.00	147.00	1	193.0	15.5	5
3.0SMCJ130A	3.0SMCJ130CA	130.00	144.00	159.00	1	209.0	14.4	5
3.0SMCJ150A	3.0SMCJ150CA	150.00	167.00	185.00	1	243.0	12.3	5
3.0SMCJ160A	3.0SMCJ160CA	160.00	178.00	197.00	1	259.0	11.6	5
3.0SMCJ170A	3.0SMCJ170CA	170.00	189.00	209.00	1	275.0	10.9	5

## RATING AND CHARACTERISTIC CURVES 3.0SMCJ SERIES

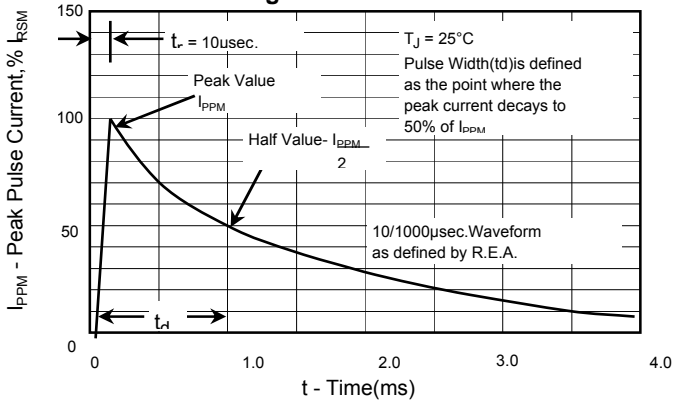
**Fig. 1 - Peak Pulse Power Rating Curve**



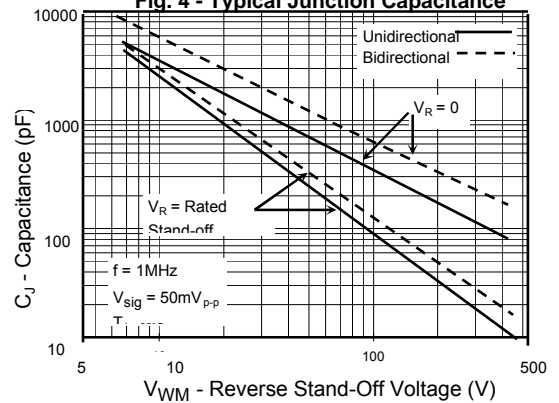
**Fig.2 - Pulse Derating Curve**



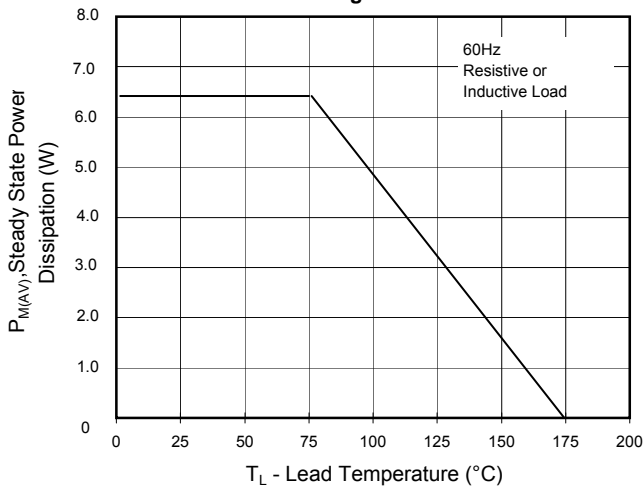
**Fig.3 - Pulse Waveform**



**Fig. 4 - Typical Junction Capacitance**



**Fig. 5 - Steady State Power Derating Curve**



**Fig.6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Only**

