

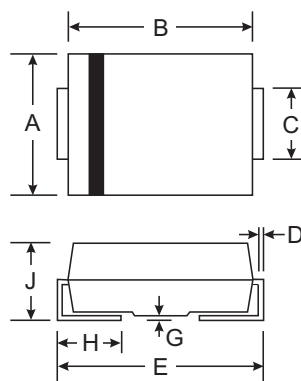
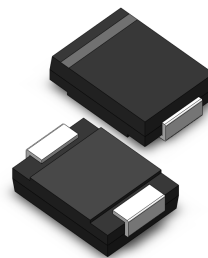
VOLTAGE RANGE: 5.0 - 170V
POWER: 3000Watts

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°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	I _{PPM}	See Table 1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note 2, 3)	I _{FSM}	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.

TYPE		Marking		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
(Uni)	(BI)	(Uni)	(BI)	V _{RWM} (V)	V _{BR} MIN(V)	V _{BR} MAX(V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
3.0SMCJ5.0A	3.0SMCJ5.0CA	RDE	DDE	5.00	6.40	7.00	10	9.2	326.1	800
3.0SMCJ6.0A	3.0SMCJ6.0CA	RDG	DDG	6.00	6.67	7.37	10	10.3	291.3	800
3.0SMCJ6.5A	3.0SMCJ6.5CA	RDK	DDK	6.50	7.22	7.98	10	11.2	267.9	500
3.0SMCJ7.0A	3.0SMCJ7.0CA	PDM	DDM	7.00	7.78	8.60	10	12.0	250.0	200
3.0SMCJ7.5A	3.0SMCJ7.5CA	PDP	DDP	7.50	8.33	9.21	1	12.9	232.6	100
3.0SMCJ8.0A	3.0SMCJ8.0CA	PDR	DDR	8.00	8.89	9.83	1	13.6	220.6	50
3.0SMCJ8.5A	3.0SMCJ8.5CA	PDT	DDT	8.50	9.44	10.40	1	14.4	208.3	20
3.0SMCJ9.0A	3.0SMCJ9.0CA	PDV	DDV	9.00	10.00	11.10	1	15.4	194.8	10
3.0SMCJ10A	3.0SMCJ10CA	PDX	DDX	10.00	11.10	12.30	1	17.0	176.5	5
3.0SMCJ11A	3.0SMCJ11CA	PDZ	DDZ	11.00	12.20	13.50	1	18.2	164.8	5
3.0SMCJ12A	3.0SMCJ12CA	PEE	DEE	12.00	13.30	14.70	1	19.9	150.8	5
3.0SMCJ13A	3.0SMCJ13CA	PEG	DEG	13.00	14.40	15.90	1	21.5	139.5	5
3.0SMCJ14A	3.0SMCJ14CA	PEK	DEK	14.00	15.60	17.20	1	23.2	129.3	5
3.0SMCJ15A	3.0SMCJ15CA	PEM	DEM	15.00	16.70	18.50	1	24.4	123.0	5
3.0SMCJ16A	3.0SMCJ16CA	PEP	DEP	16.00	17.80	19.70	1	26.0	115.4	5
3.0SMCJ17A	3.0SMCJ17CA	PER	DER	17.00	18.90	20.90	1	27.6	108.7	5
3.0SMCJ18A	3.0SMCJ18CA	PET	DET	18.00	20.00	22.10	1	29.2	102.7	5
3.0SMCJ20A	3.0SMCJ20CA	PEV	DEV	20.00	22.20	24.50	1	32.4	92.6	5
3.0SMCJ22A	3.0SMCJ22CA	PEX	DEX	22.00	24.40	26.90	1	35.5	84.5	5
3.0SMCJ24A	3.0SMCJ24CA	PEZ	DEZ	24.00	26.70	29.50	1	38.9	77.1	5
3.0SMCJ26A	3.0SMCJ26CA	PFE	DFE	26.00	28.90	31.90	1	42.1	71.3	5
3.0SMCJ28A	3.0SMCJ28CA	PFG	DFG	28.00	31.10	34.40	1	45.4	66.1	5
3.0SMCJ30A	3.0SMCJ30CA	PFK	DFK	30.00	33.30	36.80	1	48.4	62.0	5
3.0SMCJ33A	3.0SMCJ33CA	PFM	DFM	33.00	36.70	40.60	1	53.3	56.3	5
3.0SMCJ36A	3.0SMCJ36CA	PFP	DFP	36.00	40.00	44.20	1	58.1	51.6	5
3.0SMCJ40A	3.0SMCJ40CA	PFR	DFR	40.00	44.40	49.10	1	64.5	46.5	5
3.0SMCJ43A	3.0SMCJ43CA	PFT	DFT	43.00	47.80	52.80	1	69.4	43.2	5
3.0SMCJ45A	3.0SMCJ45CA	PFV	DFV	45.00	50.00	55.30	1	72.7	41.3	5
3.0SMCJ48A	3.0SMCJ48CA	PFX	DFX	48.00	53.30	58.90	1	77.4	38.8	5
3.0SMCJ51A	3.0SMCJ51CA	PFZ	DFZ	51.00	56.70	62.70	1	82.4	36.4	5
3.0SMCJ54A	3.0SMCJ54CA	PGE	DGE	54.00	60.00	66.30	1	87.1	34.4	5
3.0SMCJ58A	3.0SMCJ58CA	PGG	DGG	58.00	64.40	71.20	1	93.6	32.1	5
3.0SMCJ60A	3.0SMCJ60CA	PGK	DGK	60.00	66.70	73.70	1	96.8	31.0	5
3.0SMCJ64A	3.0SMCJ64CA	PGM	DGM	64.00	71.10	78.60	1	103.0	29.1	5
3.0SMCJ70A	3.0SMCJ70CA	PGP	DGP	70.00	77.80	86.00	1	113.0	26.5	5
3.0SMCJ75A	3.0SMCJ75CA	PGR	DGR	75.00	83.30	92.10	1	121.0	24.8	5
3.0SMCJ78A	3.0SMCJ78CA	PGT	DGT	78.00	86.70	95.80	1	126.0	23.8	5
3.0SMCJ85A	3.0SMCJ85CA	PGV	DGV	85.00	94.40	104.00	1	137.0	21.9	5
3.0SMCJ90A	3.0SMCJ90CA	PGX	DGX	90.00	100.00	111.00	1	146.0	20.5	5
3.0SMCJ100A	3.0SMCJ100CA	PGZ	DGZ	100.00	111.00	123.00	1	162.0	18.5	5
3.0SMCJ110A	3.0SMCJ110CA	PHE	DHE	110.00	122.00	135.00	1	177.0	16.9	5
3.0SMCJ120A	3.0SMCJ120CA	PHG	DHG	120.00	133.00	147.00	1	193.0	15.5	5
3.0SMCJ130A	3.0SMCJ130CA	PHK	DHK	130.00	144.00	159.00	1	209.0	14.4	5
3.0SMCJ150A	3.0SMCJ150CA	PHM	DHM	150.00	167.00	185.00	1	243.0	12.3	5
3.0SMCJ160A	3.0SMCJ160CA	PHP	DHP	160.00	178.00	197.00	1	259.0	11.6	5
3.0SMCJ170A	3.0SMCJ170CA	PHR	DHR	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

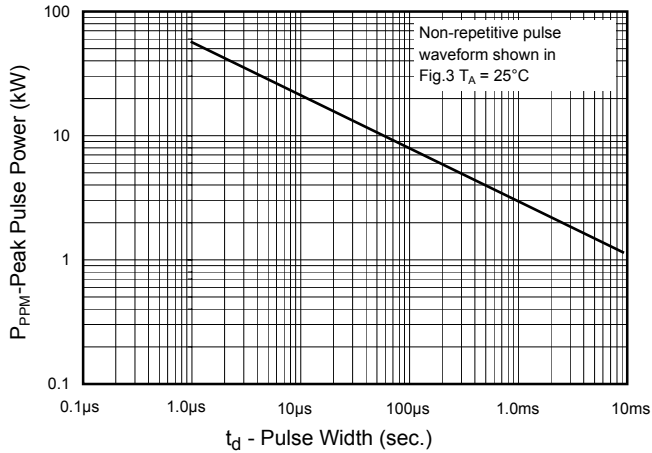


Fig.2 - Pulse Derating Curve

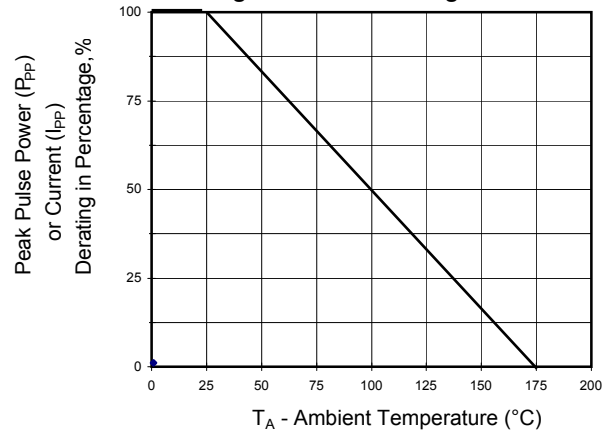


Fig.3 - Pulse Waveform

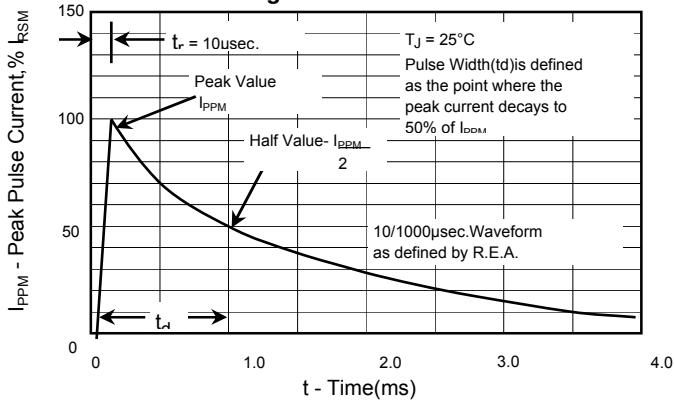


Fig. 4 - Typical Junction Capacitance

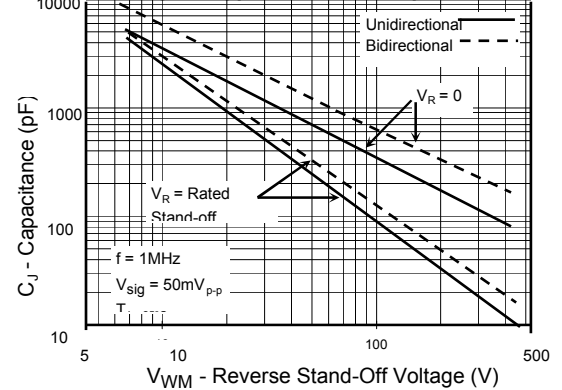


Fig. 5 - Steady State Power Derating Curve

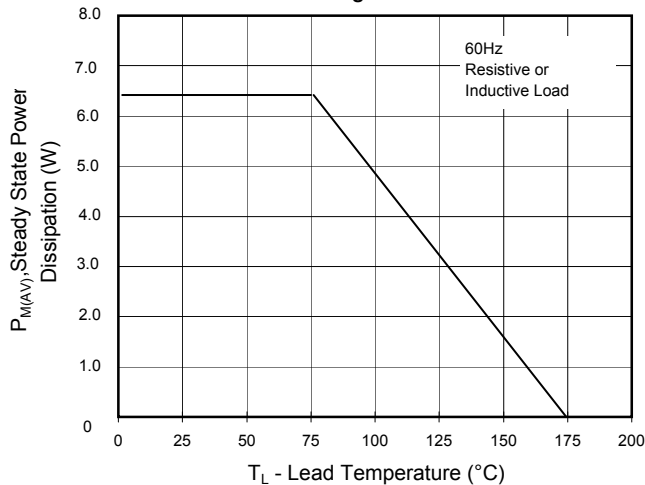


Fig.6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Only

