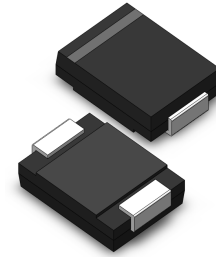


VOLTAGE RANGE: 6.8 - 170V
POWER: 3000Watts

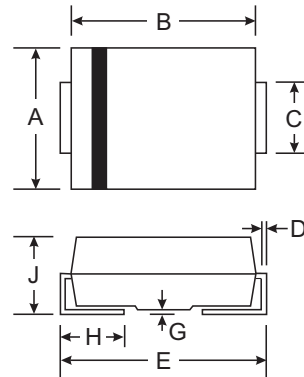


Features

- 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-O

Mechanical Data

- Case :DO-214AB(SMC)
- Terminals : Solder plated , solderable per MIL-STD-750, method 2026
- 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		

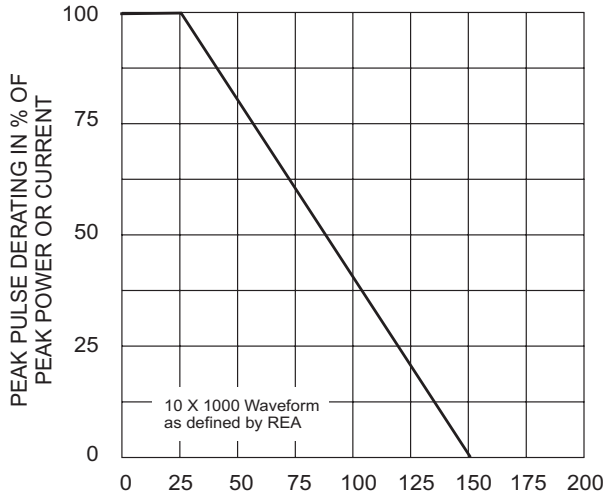
Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

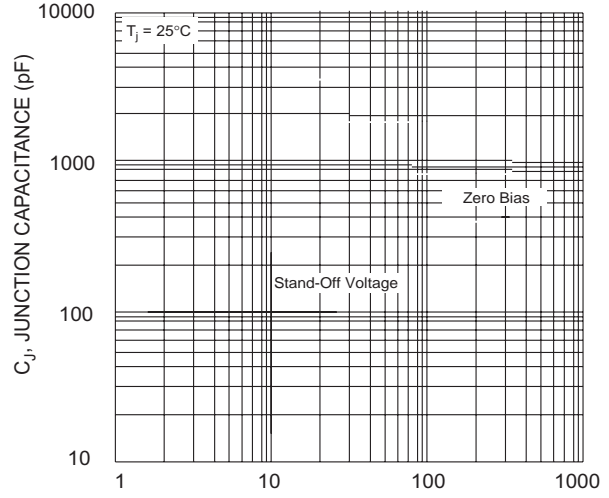
- Note: 1. Non-repetitive current pulse, per Figure 4 and derated above $T_A = 25^\circ\text{C}$ per Figure 1.
 2. Mounted on 8.0mm² copper pads to each terminal.
 3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minutes maximum.

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 (μ A)
3.0SMC6.8	3.0SMC6.8C	HDD	IDD	5.50	6.12	7.48	10.0	10.8	277.8	1000.0
3.0SMC6.8A	3.0SMC6.8CA	HDE	IDE	5.80	6.45	7.14	10.0	10.5	285.7	1000.0
3.0SMC7.5	3.0SMC7.5C	HDH	IDH	6.05	6.75	8.25	10.0	11.7	256.4	500.0
3.0SMC7.5A	3.0SMC7.5CA	HDK	IDK	6.40	7.13	7.88	10.0	11.3	265.5	500.0
3.0SMC8.2	3.0SMC8.2C	HDL	IDL	6.63	7.38	9.02	10.0	12.5	240.0	200.0
3.0SMC8.2A	3.0SMC8.2CA	HDM	IDM	7.02	7.79	8.61	10.0	12.1	247.9	200.0
3.0SMC9.1	3.0SMC9.1C	HDN	IDN	7.37	8.19	10.0	1.0	13.8	217.4	50.0
3.0SMC9.1A	3.0SMC9.1CA	HDP	IDP	7.78	8.65	9.55	1.0	13.4	223.9	50.0
3.0SMC10	3.0SMC10C	HDS	IDS	8.10	9.00	11.0	1.0	15.0	200.0	10.0
3.0SMC10A	3.0SMC10CA	HDT	IDT	8.55	9.50	10.5	1.0	14.5	206.9	10.0
3.0SMC11	3.0SMC11C	HDU	IDU	8.92	9.90	12.1	1.0	16.2	185.2	5.0
3.0SMC11A	3.0SMC11CA	HDV	IDV	9.40	10.5	11.6	1.0	15.6	192.3	5.0
3.0SMC12	3.0SMC12C	HDW	IDW	9.72	10.8	13.2	1.0	17.3	173.4	5.0
3.0SMC12A	3.0SMC12CA	HDX	IDX	10.2	11.4	12.6	1.0	16.7	179.6	5.0
3.0SMC13	3.0SMC13C	HDY	IDY	10.5	11.7	14.3	1.0	19.0	157.9	5.0
3.0SMC13A	3.0SMC13CA	HDZ	IDZ	11.1	12.4	13.7	1.0	18.2	164.8	5.0
3.0SMC15	3.0SMC15C	HEF	IEF	12.1	13.5	16.5	1.0	22.0	136.4	5.0
3.0SMC15A	3.0SMC15CA	HEG	IEG	12.8	14.3	15.8	1.0	21.2	141.5	5.0
3.0SMC16	3.0SMC16C	HEH	IEH	12.9	14.4	17.6	1.0	23.5	127.7	5.0
3.0SMC16A	3.0SMC16CA	HEK	IEK	13.6	15.2	16.8	1.0	22.5	133.3	5.0
3.0SMC18	3.0SMC18C	HEN	IEN	14.5	16.2	19.8	1.0	26.5	113.2	5.0
3.0SMC18A	3.0SMC18CA	HEP	IEP	15.3	17.1	18.9	1.0	25.2	119.0	5.0
3.0SMC20	3.0SMC20CA	HEQ	IEQ	16.2	18.0	22.0	1.0	29.1	103.1	5.0
3.0SMC20A	3.0SMC20CA	HER	IER	17.1	19.0	21.0	1.0	27.7	108.3	5.0
3.0SMC22	3.0SMC22C	HES	IES	17.8	19.8	24.2	1.0	31.9	94.0	5.0
3.0SMC22A	3.0SMC22CA	HET	IET	18.8	20.9	23.1	1.0	30.6	98.0	5.0
3.0SMC24	3.0SMC24C	HEU	IEU	19.4	21.6	26.4	1.0	34.7	86.5	5.0
3.0SMC24A	3.0SMC24CA	HEV	IEV	20.5	22.8	25.2	1.0	33.2	90.4	5.0
3.0SMC27	3.0SMC27C	HEY	IEY	21.8	24.3	29.7	1.0	39.1	76.7	5.0
3.0SMC27A	3.0SMC27CA	HEZ	IEZ	23.1	25.7	28.4	1.0	37.5	80.0	5.0
3.0SMC30	3.0SMC30C	HFD	IFD	24.3	27.0	33.0	1.0	43.5	69.0	5.0
3.0SMC30A	3.0SMC30CA	HFE	IFE	25.6	28.5	31.5	1.0	41.4	72.5	5.0
3.0SMC33	3.0SMC33C	HFF	IFF	26.8	29.7	36.3	1.0	47.7	62.9	5.0
3.0SMC33A	3.0SMC33CA	HFG	IFG	28.2	31.4	34.7	1.0	45.7	65.6	5.0
3.0SMC36	3.0SMC36C	HFH	IFH	29.1	32.4	39.6	1.0	52.0	57.7	5.0
3.0SMC36A	3.0SMC36CA	HFK	IFK	30.8	34.2	37.8	1.0	49.9	60.1	5.0
3.0SMC39	3.0SMC39C	HFL	IFL	31.6	35.1	42.9	1.0	56.4	53.2	5.0
3.0SMC39A	3.0SMC39CA	HFM	IFM	33.3	37.1	41.0	1.0	53.9	55.7	5.0
3.0SMC43	3.0SMC43C	HFN	IFN	34.8	38.7	47.3	1.0	61.9	48.5	5.0
3.0SMC43A	3.0SMC43CA	HFP	IFP	36.8	40.9	45.2	1.0	59.3	50.6	5.0
3.0SMC47	3.0SMC47C	HFQ	IFQ	38.1	42.3	51.7	1.0	67.8	44.2	5.0
3.0SMC47A	3.0SMC47CA	HFR	IFR	40.2	44.7	49.4	1.0	64.8	46.3	5.0
3.0SMC51	3.0SMC51C	HFS	IFS	41.3	45.9	56.1	1.0	73.5	40.8	5.0
3.0SMC51A	3.0SMC51CA	HFT	IFT	43.6	48.5	53.6	1.0	70.1	42.8	5.0

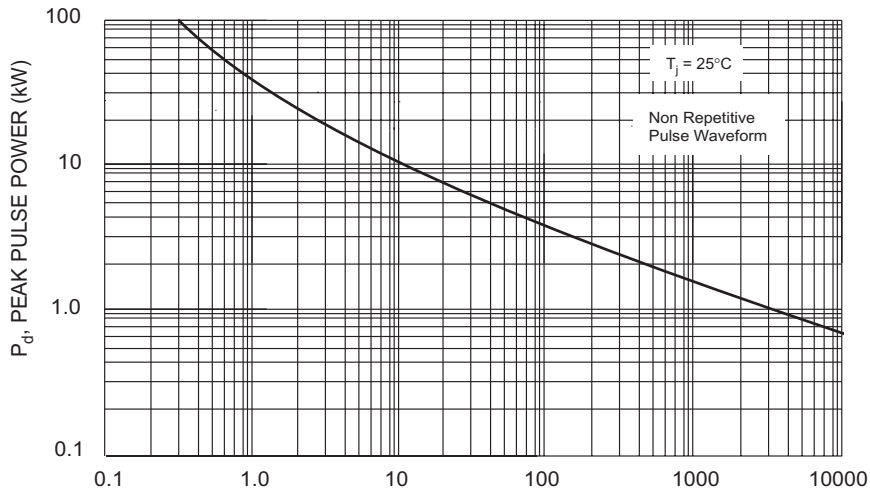
TYPE		Marking		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
(UNI)	(BI)	(Uni)	(Bi)	V _{RWM} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
3.0SMC56	3.0SMC56C	HFU	IFU	45.4	50.4	61.6	1.0	80.5	37.3	5.0
3.0SMC56A	3.0SMC56CA	HFV	IFV	47.8	53.2	58.8	1.0	77.0	39.0	5.0
3.0SMC62	3.0SMC62C	HFY	IFY	50.2	55.8	68.2	1.0	89.0	33.7	5.0
3.0SMC62A	3.0SMC62CA	HFZ	IFZ	53.0	58.9	65.1	1.0	85.0	35.3	5.0
3.0SMC68	3.0SMC68C	HGF	IGF	55.1	61.2	74.8	1.0	98.0	30.6	5.0
3.0SMC68A	3.0SMC68CA	HGG	IGG	58.1	64.6	71.4	1.0	92.0	32.6	5.0
3.0SMC75	3.0SMC75C	HGL	IGL	60.7	67.5	82.5	1.0	108	27.8	5.0
3.0SMC75A	3.0SMC75CA	HGM	IGM	64.1	71.3	78.8	1.0	103	29.1	5.0
3.0SMC82	3.0SMC82C	HGN	IGN	66.4	73.8	90.2	1.0	118	25.4	5.0
3.0SMC82A	3.0SMC82CA	HGP	IGP	70.1	77.9	86.1	1.0	113	26.5	5.0
3.0SMC91	3.0SMC91C	HGQ	IGQ	73.7	81.9	100	1.0	131	22.9	5.0
3.0SMC91A	3.0SMC91CA	HGR	IGR	77.8	86.5	95.5	1.0	125	24.0	5.0
3.0SMC100	3.0SMC100C	HGU	IGU	81.0	90.0	110	1.0	144	20.8	5.0
3.0SMC100A	3.0SMC100CA	HGV	IGV	85.5	95.0	105	1.0	137	21.9	5.0
3.0SMC110	3.0SMC110C	HGW	IGW	89.2	99.0	121	1.0	158	19.0	5.0
3.0SMC110A	3.0SMC110CA	HGX	IGX	94.0	105	116	1.0	152	19.7	5.0
3.0SMC120	3.0SMC120C	HGY	IGY	97.2	108	132	1.0	173	17.3	5.0
3.0SMC120A	3.0SMC120CA	HGZ	IGZ	102	114	126	1.0	165	18.2	5.0
3.0SMC130	3.0SMC130C	HHD	IHD	105	117	143	1.0	187	16.0	5.0
3.0SMC130A	3.0SMC130CA	HHE	IHE	111	124	137	1.0	179	16.8	5.0
3.0SMC150	3.0SMC150C	HHH	IHH	121	135	165	1.0	215	14.0	5.0
3.0SMC150A	3.0SMC150CA	HHK	IHK	128	143	158	1.0	207	14.5	5.0
3.0SMC160	3.0SMC160C	HHA	IHA	130	144	176	1.0	230	13.0	5.0
3.0SMC160A	3.0SMC160CA	HHB	IHB	136	152	168	1.0	219	13.7	5.0
3.0SMC170	3.0SMC170C	HHL	IHL	138	153	187	1.0	244	12.3	5.0
3.0SMC170A	3.0SMC170CA	HHM	IHM	145	162	179	1.0	234	12.8	5.0



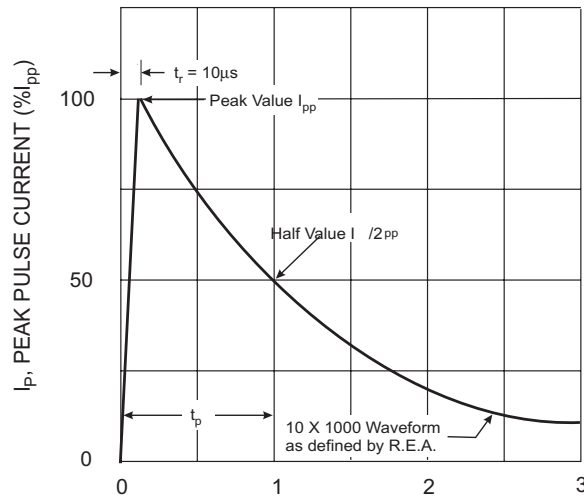
T_A , AMBIENT TEMPERATURE ($^{\circ}C$)
Fig. 1 Pulse Derating Curve



V_{WM} , STANDOFF VOLTAGE (V)
Fig. 2 Typical Junction Capacitance



t_p PULSE WIDTH (μs)
Fig. 3 Pulse Rating Curve



t , TIME (ms)
Fig. 4 Pulse Waveform