博业创信
BO YE CHUANG XIN

3.0SMC6.8A(CA) - 3.0SMC440A(CA)

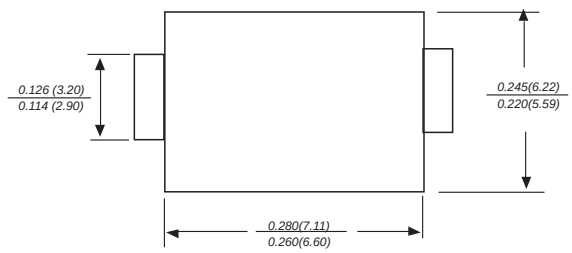
Voltage Range:6.8 - 440Volts **Peak Pulse Power:3000Watts**

Surface Mount Transient Voltage Suppressors (TVS)

Features

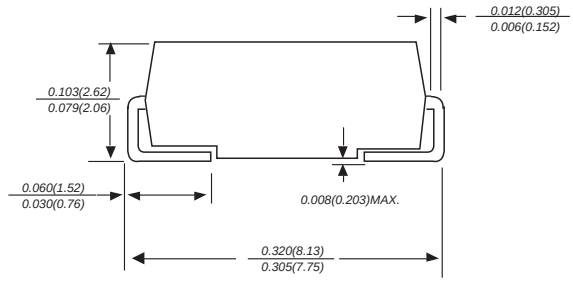
- Glass Passivated Die Construction
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O

DO-214AB/SMC



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)



Dimensions in inches and (millimeters)

Maximum Ratings T_A = 25°Cunless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000μS Waveform (Note 1, 2) Figure 3	P_{PPM}	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 8.0mm^2 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.

3.0SMC6.8A(CA) - 3.0SMC440A(CA)

RoHS **Voltage Range:6.8 - 440Volts** **Peak Pulse Power:3000Watts**

ELECTRICAL CHARACTERISTICS T_A = 25°C ,continued

Type		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)	V_{RWM}(V)	$V_{BR\ MIN}$(V)	$V_{BR\ MAX}$(V)	I_T (mA)	V_C(V)	I_{PP}(A)	I_R(uA)
3.0SMC6.8	3.0SMC6.8C	5.50	6.12	7.48	10.0	10.8	277.8	1000.0
3.0SMC6.8A	3.0SMC6.8CA	5.80	6.45	7.14	10.0	10.5	285.7	1000.0
3.0SMC7.5	3.0SMC7.5C	6.05	6.75	8.25	10.0	11.7	256.4	500.0
3.0SMC7.5A	3.0SMC7.5CA	6.40	7.13	7.88	10.0	11.3	265.5	500.0
3.0SMC8.2	3.0SMC8.2C	6.63	7.38	9.02	10.0	12.5	240.0	200.0
3.0SMC8.2A	3.0SMC8.2CA	7.02	7.79	8.61	10.0	12.1	247.9	200.0
3.0SMC9.1	3.0SMC9.1C	7.37	8.19	10.0	1.0	13.8	217.4	50.0
3.0SMC9.1A	3.0SMC9.1CA	7.78	8.65	9.55	1.0	13.4	223.9	50.0
3.0SMC10	3.0SMC10C	8.10	9.00	11.0	1.0	15.0	200.0	10.0
3.0SMC10A	3.0SMC10CA	8.55	9.50	10.5	1.0	14.5	206.9	10.0
3.0SMC11	3.0SMC11C	8.92	9.90	12.1	1.0	16.2	185.2	5.0
3.0SMC11A	3.0SMC11CA	9.40	10.5	11.6	1.0	15.6	192.3	5.0
3.0SMC12	3.0SMC12C	9.72	10.8	13.2	1.0	17.3	173.4	5.0
3.0SMC12A	3.0SMC12CA	10.2	11.4	12.6	1.0	16.7	179.6	5.0
3.0SMC13	3.0SMC13C	10.5	11.7	14.3	1.0	19.0	157.9	5.0
3.0SMC13A	3.0SMC13CA	11.1	12.4	13.7	1.0	18.2	164.8	5.0
3.0SMC15	3.0SMC15C	12.1	13.5	16.5	1.0	22.0	136.4	5.0
3.0SMC15A	3.0SMC15CA	12.8	14.3	15.8	1.0	21.2	141.5	5.0
3.0SMC16	3.0SMC16C	12.9	14.4	17.6	1.0	23.5	127.7	5.0
3.0SMC16A	3.0SMC16CA	13.6	15.2	16.8	1.0	22.5	133.3	5.0
3.0SMC18	3.0SMC18C	14.5	16.2	19.8	1.0	26.5	113.2	5.0
3.0SMC18A	3.0SMC18CA	15.3	17.1	18.9	1.0	25.2	119.0	5.0
3.0SMC20	3.0SMC20CA	16.2	18.0	22.0	1.0	29.1	103.1	5.0
3.0SMC20A	3.0SMC20CA	17.1	19.0	21.0	1.0	27.7	108.3	5.0
3.0SMC22	3.0SMC22C	17.8	19.8	24.2	1.0	31.9	94.0	5.0
3.0SMC22A	3.0SMC22CA	18.8	20.9	23.1	1.0	30.6	98.0	5.0
3.0SMC24	3.0SMC24C	19.4	21.6	26.4	1.0	34.7	86.5	5.0
3.0SMC24A	3.0SMC24CA	20.5	22.8	25.2	1.0	33.2	90.4	5.0
3.0SMC27	3.0SMC27C	21.8	24.3	29.7	1.0	39.1	76.7	5.0
3.0SMC27A	3.0SMC27CA	23.1	25.7	28.4	1.0	37.5	80.0	5.0
3.0SMC30	3.0SMC30C	24.3	27.0	33.0	1.0	43.5	69.0	5.0
3.0SMC30A	3.0SMC30CA	25.6	28.5	31.5	1.0	41.4	72.5	5.0
3.0SMC33	3.0SMC33C	26.8	29.7	36.3	1.0	47.7	62.9	5.0
3.0SMC33A	3.0SMC33CA	28.2	31.4	34.7	1.0	45.7	65.6	5.0
3.0SMC36	3.0SMC36C	29.1	32.4	39.6	1.0	52.0	57.7	5.0
3.0SMC36A	3.0SMC36CA	30.8	34.2	37.8	1.0	49.9	60.1	5.0
3.0SMC39	3.0SMC39C	31.6	35.1	42.9	1.0	56.4	53.2	5.0
3.0SMC39A	3.0SMC39CA	33.3	37.1	41.0	1.0	53.9	55.7	5.0
3.0SMC43	3.0SMC43C	34.8	38.7	47.3	1.0	61.9	48.5	5.0
3.0SMC43A	3.0SMC43CA	36.8	40.9	45.2	1.0	59.3	50.6	5.0
3.0SMC47	3.0SMC47C	38.1	42.3	51.7	1.0	67.8	44.2	5.0
3.0SMC47A	3.0SMC47CA	40.2	44.7	49.4	1.0	64.8	46.3	5.0
3.0SMC51	3.0SMC51C	41.3	45.9	56.1	1.0	73.5	40.8	5.0
3.0SMC51A	3.0SMC51CA	43.6	48.5	53.6	1.0	70.1	42.8	5.0

3.0SMC6.8A(CA) - 3.0SMC440A(CA)

RoHS **Voltage Range:6.8 - 440Volts** **Peak Pulse Power:3000Watts**

ELECTRICAL CHARACTERISTICS T_A = 25°C ,continued

TYPE		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)	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	45.4	50.4	61.6	1.0	80.5	37.3	5.0
3.0SMC56A	3.0SMC56CA	47.8	53.2	58.8	1.0	77.0	39.0	5.0
3.0SMC62	3.0SMC62C	50.2	55.8	68.2	1.0	89.0	33.7	5.0
3.0SMC62A	3.0SMC62CA	53.0	58.9	65.1	1.0	85.0	35.3	5.0
3.0SMC68	3.0SMC68C	55.1	61.2	74.8	1.0	98.0	30.6	5.0
3.0SMC68A	3.0SMC68CA	58.1	64.6	71.4	1.0	92.0	32.6	5.0
3.0SMC75	3.0SMC75C	60.7	67.5	82.5	1.0	108	27.8	5.0
3.0SMC75A	3.0SMC75CA	64.1	71.3	78.8	1.0	103	29.1	5.0
3.0SMC82	3.0SMC82C	66.4	73.8	90.2	1.0	118	25.4	5.0
3.0SMC82A	3.0SMC82CA	70.1	77.9	86.1	1.0	113	26.5	5.0
3.0SMC91	3.0SMC91C	73.7	81.9	100	1.0	131	22.9	5.0
3.0SMC91A	3.0SMC91CA	77.8	86.5	95.5	1.0	125	24.0	5.0
3.0SMC100	3.0SMC100C	81.0	90.0	110	1.0	144	20.8	5.0
3.0SMC100A	3.0SMC100CA	85.5	95.0	105	1.0	137	21.9	5.0
3.0SMC110	3.0SMC110C	89.2	99.0	121	1.0	158	19.0	5.0
3.0SMC110A	3.0SMC110CA	94.0	105	116	1.0	152	19.7	5.0
3.0SMC120	3.0SMC120C	97.2	108	132	1.0	173	17.3	5.0
3.0SMC120A	3.0SMC120CA	102	114	126	1.0	165	18.2	5.0
3.0SMC130	3.0SMC130C	105	117	143	1.0	187	16.0	5.0
3.0SMC130A	3.0SMC130CA	111	124	137	1.0	179	16.8	5.0
3.0SMC150	3.0SMC150C	121	135	165	1.0	215	14.0	5.0
3.0SMC150A	3.0SMC150CA	128	143	158	1.0	207	14.5	5.0
3.0SMC160	3.0SMC160C	130	144	176	1.0	230	13.0	5.0
3.0SMC160A	3.0SMC160CA	136	152	168	1.0	219	13.7	5.0
3.0SMC170	3.0SMC170C	138	153	187	1.0	244	12.3	5.0
3.0SMC170A	3.0SMC170CA	145	162	179	1.0	234	12.8	5.0
3.0SMC180	3.0SMC180C	146	162	198	1.0	258	11.6	5.0
3.0SMC180A	3.0SMC180CA	154	171	189	1.0	246	12.2	5.0
3.0SMC200	3.0SMC200C	162	180	220	1.0	287	10.5	5.0
3.0SMC200A	3.0SMC200CA	171	190	210	1.0	274	10.9	5.0
3.0SMC220	3.0SMC220C	175	198	242	1.0	344	8.7	5.0
3.0SMC220A	3.0SMC220CA	185	209	231	1.0	328	9.1	5.0
3.0SMC250	3.0SMC250C	202	225	275	1.0	360	8.3	5.0
3.0SMC250A	3.0SMC250CA	214	237	263	1.0	344	8.7	5.0
3.0SMC300	3.0SMC300C	243	270	330	1.0	430	7.0	5.0
3.0SMC300A	3.0SMC300CA	256	285	315	1.0	414	7.2	5.0
3.0SMC350	3.0SMC350C	284	315	385	1.0	504	6.0	5.0
3.0SMC350A	3.0SMC350CA	300	333	368	1.0	482	6.2	5.0
3.0SMC400	3.0SMC400C	324	360	440	1.0	574	5.2	5.0
3.0SMC400A	3.0SMC400CA	342	380	420	1.0	548	5.5	5.0
3.0SMC440	3.0SMC440C	356	396	484	1.0	631	4.8	5.0
3.0SMC440A	3.0SMC440CA	376	418	462	1.0	600	5.0	5.0

3.0SMC6.8A(CA) - 3.0SMC440A(CA)

RoHS **Voltage Range:6.8 - 440Volts** **Peak Pulse Power:3000Watts**

Characteristic Curves T_A = 25°C unless otherwise noted

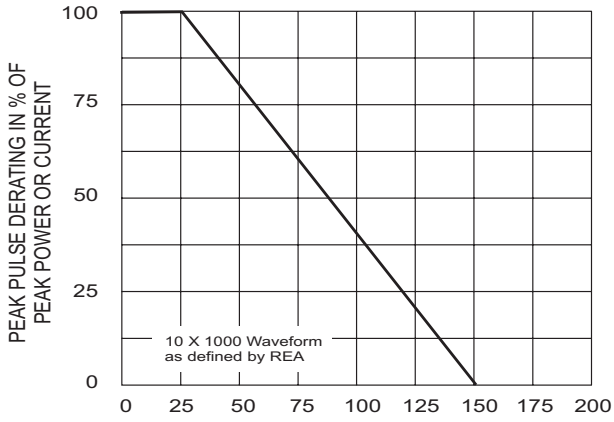


Fig. 1 Pulse Derating Curve

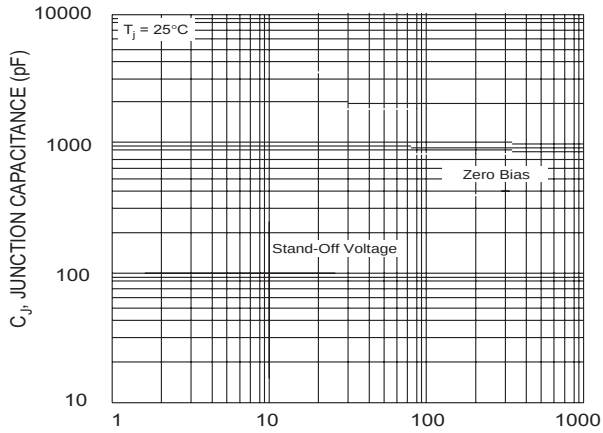


Fig. 2 Typical Junction Capacitance

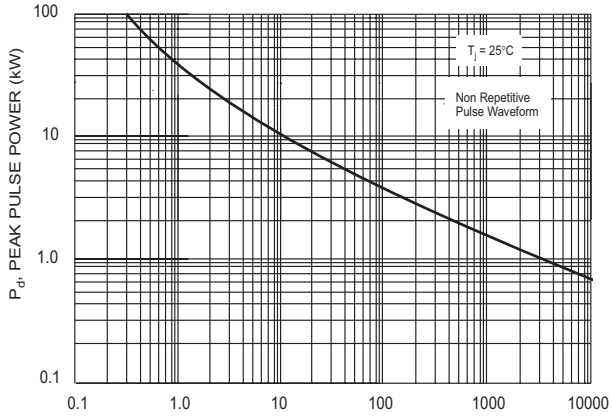


Fig. 3 Pulse Rating Curve

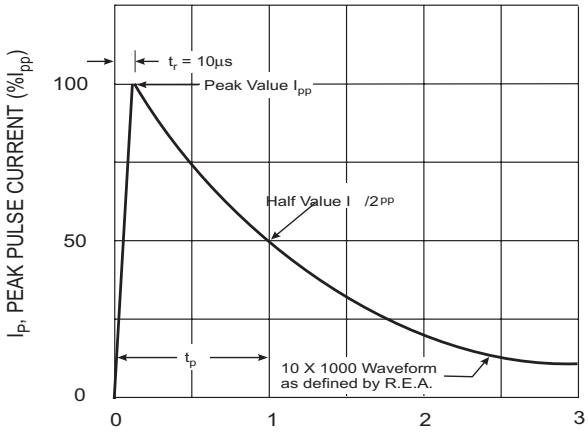
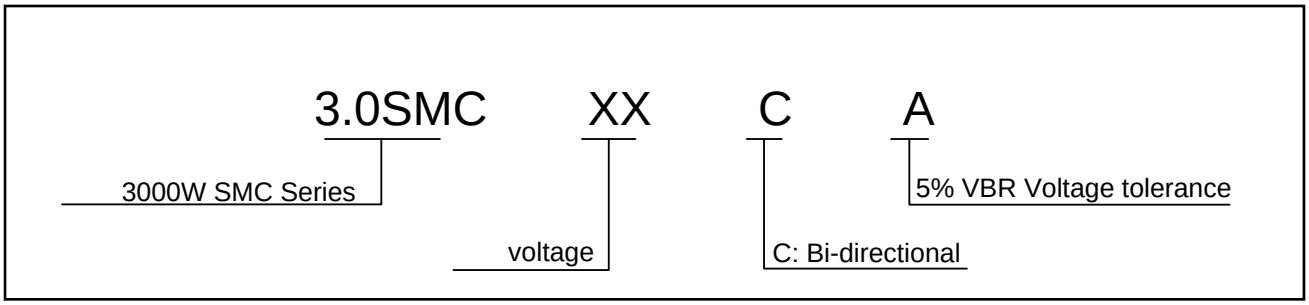


Fig. 4 Pulse Waveform

Ordering Information



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