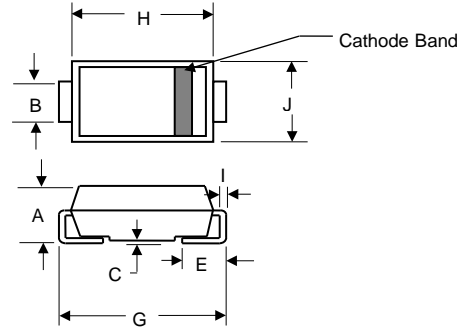


Features

- * Glass Passivated Die Construction
- * 3000W Peak Pulse Power Dissipation
- * 5.0V – 170V Standoff Voltage
- * Uni- and Bi-Directional Versions Available
- * Excellent Clamping Capability
- * Fast Response Time
- * Plastic Case Material has UL Flammability Classification Rating 94V-O



RoHS
COMPLIANT



DO-214AB (SMC)				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.079	0.103	2.06	2.62
B	0.114	0.126	2.9	3.2
C	---	0.008	---	0.203
E	0.03	0.06	0.76	1.52
G	0.305	0.320	7.75	8.13
H	0.260	0.280	6.60	7.11
I	0.006	0.012	0.152	0.305
J	0.220	0.245	5.59	6.22

Mechanical Data

- * Case: JEDEC DO-214AB Low Profile Molded Plastic
- * Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- * Polarity: Cathode Band or Cathode Notch
- * Marking:
 Unidirectional – Device Code and Cathode Band
 Bidirectional – Device Code Only
- * Weight: 0.21 g (approximately)

Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation 10/1000μS Waveform (Note 1, 2) Figure 3	P _{PPM}	3000 Minimum	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.



3.0SMCJ SERIES

3000W Surface Mount Transient Voltage Suppressors

Electrical Characteristics (T_A=25°C unless otherwise noted)

UNI- DIRECTIONAL PART NO.	BI- DIRECTIONAL PART NO.	REVERSE STAND-OFF VOLTAGE V _{RWM} (V)	BREAKDOWN VOLTAGE V _{BR} (V) MIN. @I _T	BREAKDOWN VOLTAGE V _{BR} (V) MAX. @I _T	TEST CURRENT I _T (mA)	MAXIMUM CLAMPING VOLTAGE @I _{pp} V _c (V)	PEAK PULSE CURRENT I _{pp} (A)	REVERSE LEAKAGE @V _{RWM} I _r (uA)
3.0SMCJ5.0	3.0SMCJ5.0C	5	6.4	7.55	10	9.6	312.5	1000
3.0SMCJ5.0A	3.0SMCJ5.0CA	5	6.4	7.25	10	9.2	326	1000
3.0SMCJ6.0	3.0SMCJ6.0C	6	6.67	8.45	10	11.4	263.2	1000
3.0SMCJ6.0A	3.0SMCJ6.0CA	6	6.67	7.67	10	10.3	291.3	1000
3.0SMCJ6.5	3.0SMCJ6.5C	6.5	7.22	9.14	10	12.3	243.9	500
3.0SMCJ6.5A	3.0SMCJ6.5CA	6.5	7.22	8.3	10	11.2	267.9	500
3.0SMCJ7.0	3.0SMCJ7.0C	7	7.78	9.86	10	13.3	225.6	200
3.0SMCJ7.0A	3.0SMCJ7.0CA	7	7.78	8.95	10	12	250	200
3.0SMCJ7.5	3.0SMCJ7.5C	7.5	8.33	10.67	1	14.3	209.8	100
3.0SMCJ7.5A	3.0SMCJ7.5CA	7.5	8.33	9.58	1	12.9	232.6	100
3.0SMCJ8.0	3.0SMCJ8.0C	8	8.99	11.3	1	15	220	50
3.0SMCJ8.0A	3.0SMCJ8.0CA	8	8.99	10.23	1	13.6	220.6	50
3.0SMCJ8.5	3.0SMCJ8.5C	8.5	9.44	11.92	1	15.9	188.8	25
3.0SMCJ8.5A	3.0SMCJ8.5CA	8.5	9.44	10.82	1	14.4	208.4	25
3.0SMCJ9.0	3.0SMCJ9.0C	9	10	12.6	1	16.9	177.4	10
3.0SMCJ9.0A	3.0SMCJ9.0CA	9	10	11.5	1	15.4	194.8	10
3.0SMCJ10	3.0SMCJ10C	10	11.1	14.1	1	18.8	159.6	5
3.0SMCJ10A	3.0SMCJ10CA	10	11.1	12.8	1	17	176.4	5
3.0SMCJ11	3.0SMCJ11C	11	12.2	15.4	1	20.1	149.2	5
3.0SMCJ11A	3.0SMCJ11CA	11	12.2	14	1	18.2	184.8	5
3.0SMCJ12	3.0SMCJ12C	12	13.3	16.9	1	22	136.4	5
3.0SMCJ12A	3.0SMCJ12CA	12	13.3	15.3	1	19.9	150.6	5
3.0SMCJ13	3.0SMCJ13C	13	14.4	18.2	1	23.8	126	5
3.0SMCJ13A	3.0SMCJ13CA	13	14.4	16.5	1	21.5	139.4	5
3.0SMCJ14	3.0SMCJ14C	14	15.6	19.8	1	25.8	116.2	5
3.0SMCJ14A	3.0SMCJ14CA	14	15.6	17.9	1	23.2	129.4	5
3.0SMCJ15	3.0SMCJ15C	15	16.7	21.1	1	26.9	111.6	5
3.0SMCJ15A	3.0SMCJ15CA	15	16.7	19.2	1	24.4	123	5
3.0SMCJ16	3.0SMCJ16C	16	17.8	22.6	1	28.8	104.2	5
3.0SMCJ16A	3.0SMCJ16CA	16	17.8	20.5	1	26	115.4	5
3.0SMCJ17	3.0SMCJ17C	17	18.9	23.9	1	30.5	98.4	5
3.0SMCJ17A	3.0SMCJ17CA	17	18.9	21.7	1	27.6	106.6	5
3.0SMCJ18	3.0SMCJ18C	18	20	25.3	1	32.2	93.2	5
3.0SMCJ18A	3.0SMCJ18CA	18	20	23.3	1	29.2	102.8	5
3.0SMCJ20	3.0SMCJ20C	20	22.2	28.1	1	35.8	83.8	5
3.0SMCJ20A	3.0SMCJ20CA	20	22.2	25.5	1	32.4	92.6	5
3.0SMCJ22	3.0SMCJ22C	22	24.4	30.9	1	39.4	76.2	5
3.0SMCJ22A	3.0SMCJ22CA	22	24.4	28	1	35.5	84.4	5
3.0SMCJ24	3.0SMCJ24C	24	26.7	33.8	1	43	69.8	5
3.0SMCJ24A	3.0SMCJ24CA	24	26.7	30.7	1	38.9	77.2	5
3.0SMCJ26	3.0SMCJ26C	26	28.9	36.6	1	46.6	64.4	5
3.0SMCJ26A	3.0SMCJ26CA	26	28.9	33.2	1	42.1	71.2	5
3.0SMCJ28	3.0SMCJ28C	28	31.1	39.4	1	50	60	5
3.0SMCJ28A	3.0SMCJ28CA	28	31.1	35.8	1	45.4	66	5
3.0SMCJ30	3.0SMCJ30C	30	33.3	42.2	1	53.5	56	5
3.0SMCJ30A	3.0SMCJ30CA	30	33.3	38.3	1	48.4	62	5



3.0SMCJ SERIES

3000W Surface Mount Transient Voltage Suppressors

Electrical Characteristics (T_A=25°C unless otherwise noted)

UNI- DIRECTIONAL PART NO.	BI- DIRECTIONAL PART NO.	REVERSE STAND-OFF VOLTAGE V _{RWM} (V)	BREAKDOWN VOLTAGE V _{BR} (V) MIN. @I _T	BREAKDOWN VOLTAGE V _{BR} (V) MAX. @I _T	TEST CURRENT I _T (mA)	MAXIMUM CLAMPING VOLTAGE @I _{pp} V _c (V)	PEAK PULSE CURRENT I _{pp} (A)	REVERSE LEAKAGE @V _{RWM} I _R (uA)
3.0SMCJ33	3.0SMCJ33C	33	36.7	46.5	1	59	50.4	5
3.0SMCJ33A	3.0SMCJ33CA	33	36.7	42.2	1	53.3	56.2	5
3.0SMCJ36	3.0SMCJ36C	36	40	50.7	1	64.3	46.6	5
3.0SMCJ36A	3.0SMCJ36CA	36	40	46	1	58.1	51.6	5
3.0SMCJ40	3.0SMCJ40C	40	44.4	56.3	1	71.4	42	5
3.0SMCJ40A	3.0SMCJ40CA	40	44.4	51.1	1	64.5	46.4	5
3.0SMCJ43	3.0SMCJ43C	43	47.8	60.5	1	76.6	39.2	5
3.0SMCJ43A	3.0SMCJ43CA	43	47.8	54.9	1	69.4	43.2	5
3.0SMCJ45	3.0SMCJ45C	45	50	63.3	1	80.3	37.4	5
3.0SMCJ45A	3.0SMCJ45CA	45	50	57.5	1	72.7	41.2	5
3.0SMCJ48	3.0SMCJ48C	48	53.3	67.5	1	85.5	35	5
3.0SMCJ48A	3.0SMCJ48CA	48	53.3	61.3	1	77.4	38.8	5
3.0SMCJ51	3.0SMCJ51C	51	56.7	71.8	1	91.1	37	5
3.0SMCJ51A	3.0SMCJ51CA	51	56.7	65.2	1	82.4	36.4	5
3.0SMCJ54	3.0SMCJ54C	54	60	76	1	96.3	31.2	5
3.0SMCJ54A	3.0SMCJ54CA	54	60	69	1	87.1	34.4	5
3.0SMCJ58	3.0SMCJ58C	58	64.4	81.6	1	103	29.2	5
3.0SMCJ58A	3.0SMCJ58CA	58	64.4	74.1	1	93.6	32	5
3.0SMCJ60	3.0SMCJ60C	60	66.7	84.5	1	107	28	5
3.0SMCJ60A	3.0SMCJ60CA	60	66.7	76.7	1	96.8	31	5
3.0SMCJ64	3.0SMCJ64C	64	71.1	90.1	1	114	26.4	5
3.0SMCJ64A	3.0SMCJ64CA	64	71.1	81.8	1	103	29.2	5
3.0SMCJ70	3.0SMCJ70C	70	77.8	98.6	1	125	24	5
3.0SMCJ70A	3.0SMCJ70CA	70	77.8	89.5	1	113	26.6	5
3.0SMCJ75	3.0SMCJ75C	75	83.3	105.7	1	134	22.4	5
3.0SMCJ75A	3.0SMCJ75CA	75	83.3	95.8	1	121	24.8	5
3.0SMCJ78	3.0SMCJ78C	78	86.7	109.8	1	139	21.6	5
3.0SMCJ78A	3.0SMCJ78CA	78	86.7	99.7	1	126	22.8	5
3.0SMCJ85	3.0SMCJ85C	85	94.4	119.2	1	151	19.8	5
3.0SMCJ85A	3.0SMCJ85CA	85	94.4	108.2	1	137	20.8	5
3.0SMCJ90	3.0SMCJ90C	90	100	126.5	1	160	18.8	5
3.0SMCJ90A	3.0SMCJ90CA	90	100	115.5	1	146	20.6	5
3.0SMCJ100	3.0SMCJ100C	100	111	141	1	179	16.6	5
3.0SMCJ100A	3.0SMCJ100CA	100	111	128	1	162	18.6	5
3.0SMCJ110	3.0SMCJ110C	110	122	154.5	1	196	15.4	5
3.0SMCJ110A	3.0SMCJ110CA	110	122	140.5	1	177	16.8	5
3.0SMCJ120	3.0SMCJ120C	120	133	169	1	214	14	5
3.0SMCJ120A	3.0SMCJ120CA	120	133	153	1	193	15.6	5
3.0SMCJ130	3.0SMCJ130C	130	144	182.5	1	231	13	5
3.0SMCJ130A	3.0SMCJ130CA	130	144	165.5	1	209	14.4	5
3.0SMCJ150	3.0SMCJ150C	150	167	211.5	1	269	11.2	5
3.0SMCJ150A	3.0SMCJ150CA	150	167	192.5	1	243	12.4	5
3.0SMCJ160	3.0SMCJ160C	160	178	226	1	287	10.4	5
3.0SMCJ160A	3.0SMCJ160CA	160	178	205	1	259	11.6	5
3.0SMCJ170	3.0SMCJ170C	170	189	239.5	1	304	9.8	5
3.0SMCJ170A	3.0SMCJ170CA	170	189	217.5	1	275	11	5

Ratings and Characteristic Curves

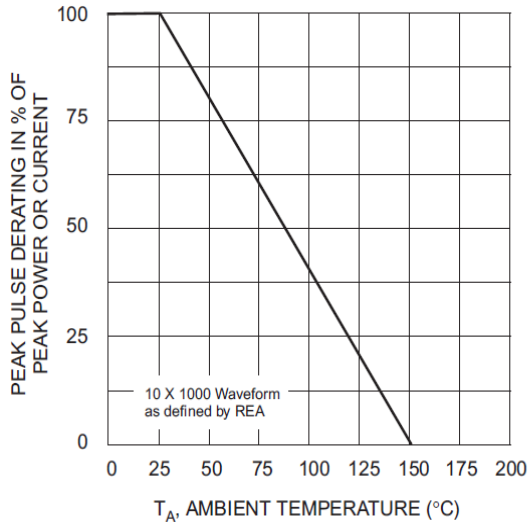


Fig. 1 Pulse Derating Curve

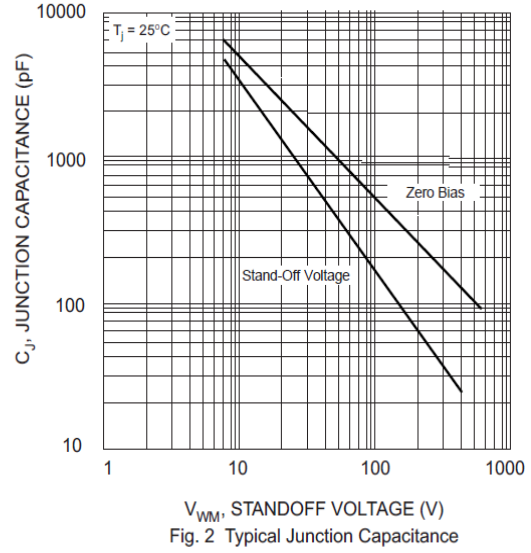


Fig. 2 Typical Junction Capacitance

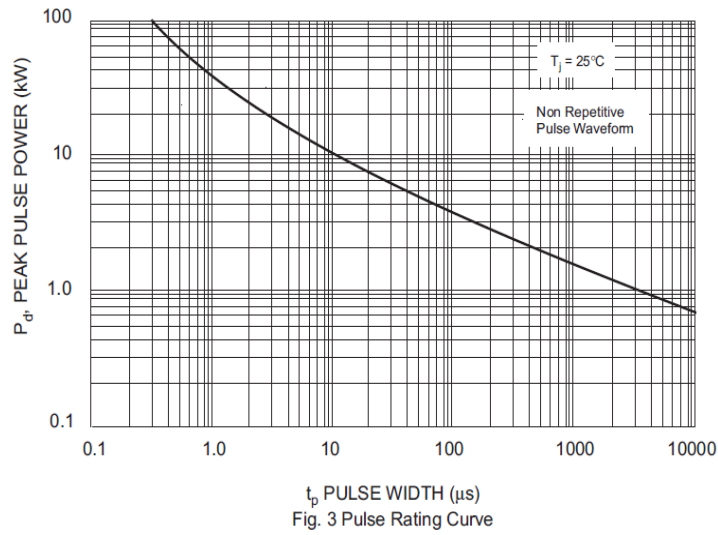


Fig. 3 Pulse Rating Curve

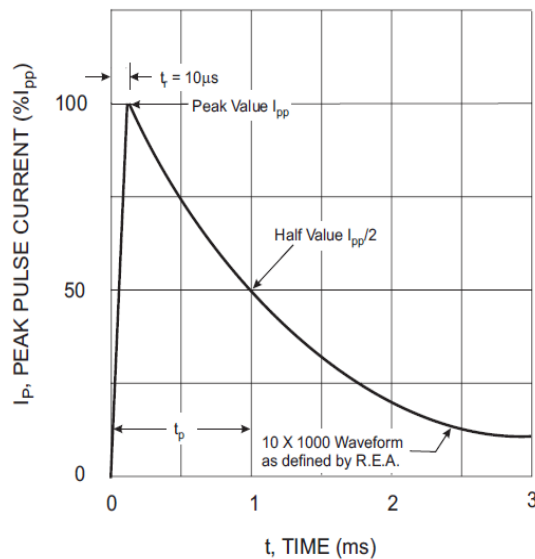


Fig. 4 Pulse Waveform



3.0SMCJ SERIES

3000W Surface Mount Transient Voltage Suppressors

Ordering Information

Part No.	Package	Packing Code	Packing
3.0SMCJ SERIES	DO-214AB (SMC)	R30	3000pcs/Reel

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