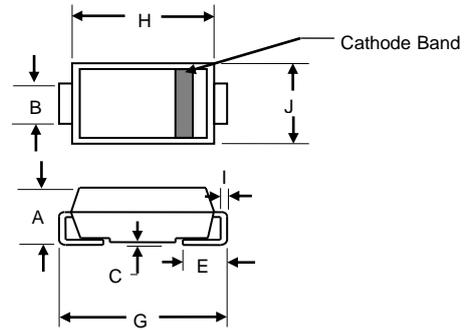


Features

- * Glass passivated chip
- * 3000 W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- * Excellent clamping capability
- * Low reverse leakage
- * Very fast response time



RoHS
COMPLIANT



DO-214AB (SMC)				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.081	0.106	2.06	2.7
B	0.108	0.128	2.75	3.25
C	---	0.008	---	0.203
E	0.030	0.060	0.76	1.52
G	0.291	0.331	7.4	8.4
H	0.256	0.280	6.50	7.11
I	0.006	0.012	0.152	0.305
J	0.217	0.245	5.5	6.22

Mechanical Data

- * Case: DO-214AB/(SMC) Molded plastic
- * Lead: Solderable per MIL-STD-750, method 2026
- * Epoxy: UL 94V-0 rate flame retardant
- * Polarity: Color band denotes cathode end except Bipolar
- * Mounting position: Any

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

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform ⁽¹⁾	P _{PP}	3000	W
Peak pulse current with a 10/1000 us waveform ⁽¹⁾	I _{PP}	See Next Table	A
Power dissipation on infinite heatsink at T _L = 75 °C	P _D	6.5	W
Peak forward surge current, 8.3 ms single half sinewave unidirectional only ⁽²⁾	I _{FSM}	300	A
Maximum instantaneous forward voltage at 100 A for unidirectional only ⁽³⁾	V _F	3.5/6.5	V
Operating junction and storage temperature range	T _J / T _{STG}	-55 to +150	°C

Note: 1) Non-repetitive current pulse per Fig.5 and derated above T_A= 25 °C per Fig.1;

2) Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum;

3) V_F<3.5V for devices of V_{BR}<200V and V_F<6.5V for devices of V_{BR}>201V.



3.0SMCJ SERIES

Surface Mount Transient Voltage Suppressors

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

Part Number		Reverse Stand-off Voltage	Breakdown Voltage V _{BR} @ I _T		Test Current	Max. Clamping Voltage @ I _{PP}	Max. Peak Pulse Current	Max. Reverse Leakage @ V _{RWM}
UNI-POLAR	BI-POLAR	V _{RWM} (V)	Min.(V)	Max.(V)	I _T (mA)	V _C MAX.(V)	I _{PP} (A)	I _R (μA)
3.0SMCJ5.0A	3.0SMCJ5.0CA	5	6.4	7	10	9.2	326.1	800
3.0SMCJ6.0A	3.0SMCJ6.0CA	6	6.67	7.37	10	10.3	291.3	800
3.0SMCJ6.5A	3.0SMCJ6.5CA	6.5	7.22	7.98	10	11.2	267.9	500
3.0SMCJ7.0A	3.0SMCJ7.0CA	7	7.78	8.6	10	12	250	200
3.0SMCJ7.5A	3.0SMCJ7.5CA	7.5	8.33	9.21	1	12.9	232.6	100
3.0SMCJ8.0A	3.0SMCJ8.0CA	8	8.89	9.83	1	13.6	220.6	50
3.0SMCJ8.5A	3.0SMCJ8.5CA	8.5	9.44	10.4	1	14.4	208.3	20
3.0SMCJ9.0A	3.0SMCJ9.0CA	9	10	11.1	1	15.4	194.8	10
3.0SMCJ10A	3.0SMCJ10CA	10	11.1	12.3	1	17	176.5	5
3.0SMCJ11A	3.0SMCJ11CA	11	12.2	13.5	1	18.2	164.8	1
3.0SMCJ12A	3.0SMCJ12CA	12	13.3	14.7	1	19.9	150.8	1
3.0SMCJ13A	3.0SMCJ13CA	13	14.4	15.9	1	21.5	139.5	1
3.0SMCJ14A	3.0SMCJ14CA	14	15.6	17.2	1	23.2	129.3	1
3.0SMCJ15A	3.0SMCJ15CA	15	16.7	18.5	1	24.4	123	1
3.0SMCJ16A	3.0SMCJ16CA	16	17.8	19.7	1	26	115.4	1
3.0SMCJ17A	3.0SMCJ17CA	17	18.9	20.9	1	27.6	108.7	1
3.0SMCJ18A	3.0SMCJ18CA	18	20	22.1	1	29.2	102.7	1
3.0SMCJ20A	3.0SMCJ20CA	20	22.2	24.5	1	32.4	92.6	1
3.0SMCJ22A	3.0SMCJ22CA	22	24.4	26.9	1	35.5	84.5	1
3.0SMCJ24A	3.0SMCJ24CA	24	26.7	29.5	1	38.9	77.1	1
3.0SMCJ26A	3.0SMCJ26CA	26	28.9	31.9	1	42.1	71.3	1
3.0SMCJ28A	3.0SMCJ28CA	28	31.1	34.4	1	45.4	66.1	1
3.0SMCJ30A	3.0SMCJ30CA	30	33.5	36.8	1	48.4	62	1
3.0SMCJ33A	3.0SMCJ33CA	33	36.7	40.6	1	53.3	56.3	1
3.0SMCJ36A	3.0SMCJ36CA	36	40	44.2	1	58.1	51.6	1
3.0SMCJ40A	3.0SMCJ40CA	40	44.4	49.1	1	64.5	46.5	1
3.0SMCJ43A	3.0SMCJ43CA	43	47.8	52.8	1	69.4	43.2	1
3.0SMCJ45A	3.0SMCJ45CA	45	50	55.3	1	72.7	41.3	1
3.0SMCJ48A	3.0SMCJ48CA	48	53.3	58.9	1	77.4	38.8	1
3.0SMCJ51A	3.0SMCJ51CA	51	56.7	62.7	1	82.4	36.4	1
3.0SMCJ54A	3.0SMCJ54CA	54	60	66.3	1	87.1	34.4	1
3.0SMCJ58A	3.0SMCJ58CA	58	64.4	71.2	1	93.6	32.1	1
3.0SMCJ60A	3.0SMCJ60CA	60	66.7	73.7	1	96.8	31	1
3.0SMCJ64A	3.0SMCJ64CA	64	71.1	78.6	1	103	29.1	1
3.0SMCJ70A	3.0SMCJ70CA	70	77.8	86	1	113	26.5	1
3.0SMCJ75A	3.0SMCJ75CA	75	83.3	92.1	1	121	24.8	1
3.0SMCJ78A	3.0SMCJ78CA	78	86.7	95.8	1	126	23.8	1
3.0SMCJ85A	3.0SMCJ85CA	85	94.4	104	1	137	21.9	1
3.0SMCJ90A	3.0SMCJ90CA	90	100	111	1	146	20.5	1
3.0SMCJ100A	3.0SMCJ100CA	100	111	123	1	162	18.5	1
3.0SMCJ110A	3.0SMCJ110CA	110	122	135	1	177	16.9	1
3.0SMCJ120A	3.0SMCJ120CA	120	133	147	1	193	15.5	1
3.0SMCJ130A	3.0SMCJ130CA	130	144	159	1	209	14.4	1
3.0SMCJ150A	3.0SMCJ150CA	150	167	185	1	243	12.3	1
3.0SMCJ160A	3.0SMCJ160CA	160	178	197	1	259	11.6	1
3.0SMCJ170A	3.0SMCJ170CA	170	189	209	1	275	10.9	1
3.0SMCJ180A	3.0SMCJ180CA	180	201	222	1	292	10.3	1
3.0SMCJ190A	3.0SMCJ190CA	190	209	243	1	308	9.7	1
3.0SMCJ200A	3.0SMCJ200CA	200	224	247	1	324	9.3	1
3.0SMCJ210A	3.0SMCJ210CA	210	231	268	1	340	8.8	1
3.0SMCJ220A	3.0SMCJ220CA	220	246	272	1	356	8.4	1
3.0SMCJ250A		250	279	309	1	405	7.4	1
3.0SMCJ300A		300	335	371	1	486	6.2	1
3.0SMCJ350A		350	391	432	1	567	5.3	1
3.0SMCJ400A		400	447	494	1	648	4.6	1
3.0SMCJ440A		440	492	543	1	713	4.2	1

Ratings and Characteristic Curves

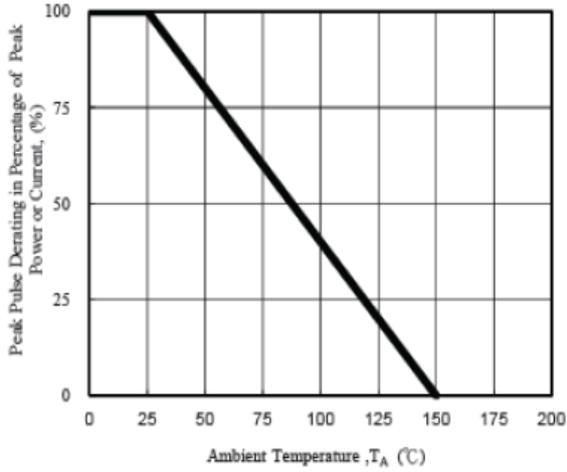


Fig. 1 - Pulse Derating Curve

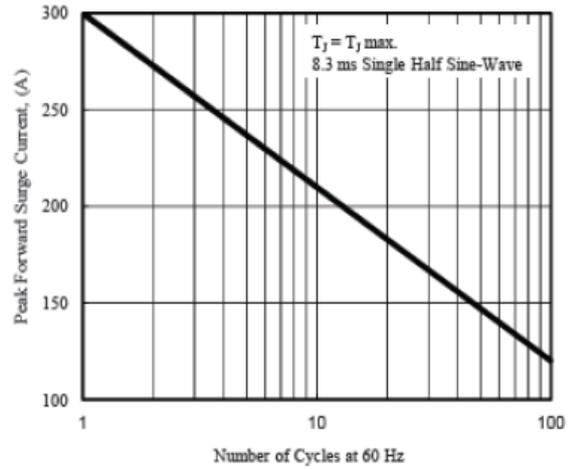


Fig. 2 - Maximum Non-Repetitive Surge Current

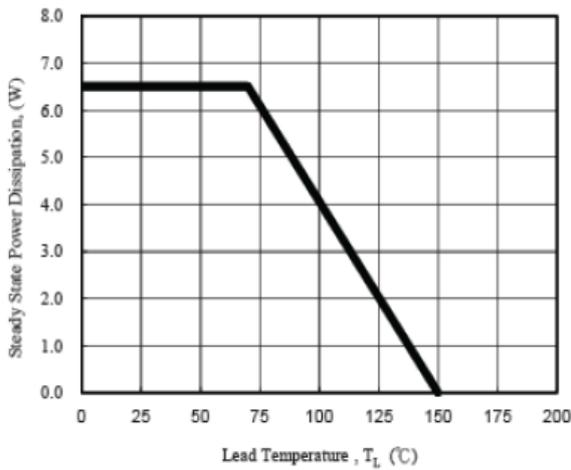


Fig. 3 - Steady State Power Derating Curve

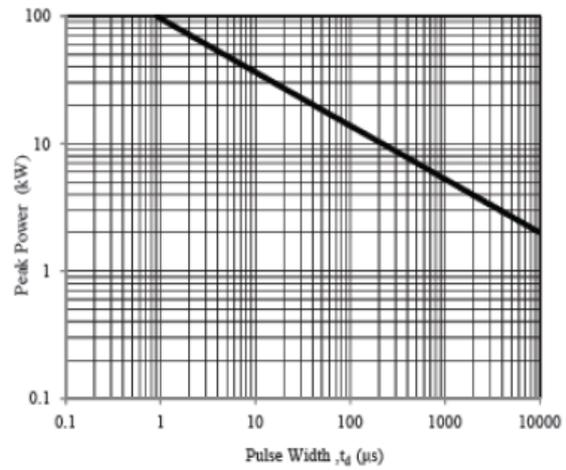


Fig. 4 - Peak Pulse Power Rating Curve

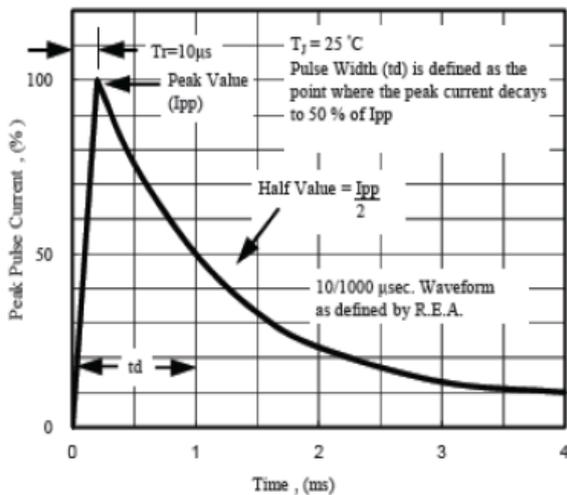


Fig. 5 - Pulse Waveform

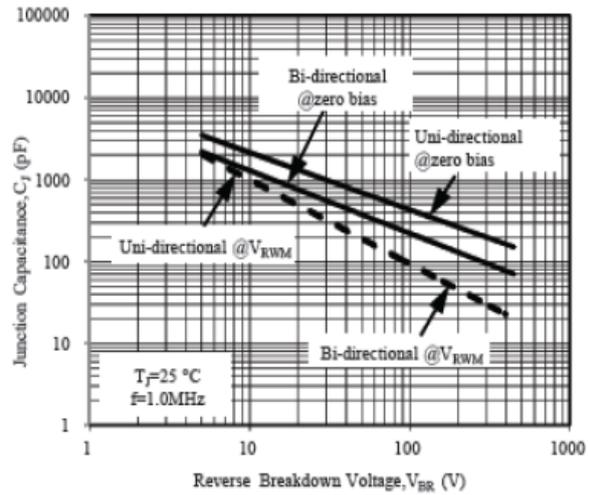


Fig. 6 - Typical Junction Capacitance



3.0SMCJ SERIES

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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