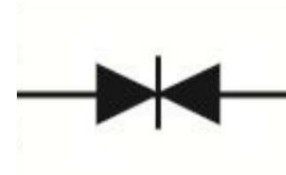


SMDJ*** CAseries

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR
VOLTAGE 5 TO 250 Volts,3000 Watt Peak Pulse Power

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- Repetition Rate (duty cycle):0.01%
- Fast response time: typically less than 1.0ps
- Typical IR less than 1mA above 10V
- High temperature soldering guaranteed:
260°C/10 seconds,
- Weight: 0.26g



2.MECHANICAL DATA

Case: JEDEC DO-214AB (SMC)

Terminals: Plated leads, solderable per MIL-STD-202, Method 208

Polarity: Without Color band denoted cathode

Mounting Position: Any

3. MAXIMUM RATINGS(Ta = 25°C)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	Symbol	VALUE	UNITS
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_P=1\text{ms}$ (Note 1)	P_{PPM}	Minimum3000	Watts
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ (Note 2)	$P_{M(AV)}$	6.5	Watts
Operating Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-55 to +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
2. Mounted on 0.31 x 0.31" (8.0 x 8.0mm) copper pads to each terminal.
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minu

SMDJ*** CA Series

Bi-Directional Part Number	Device marking code	Reverse Stand-off Voltage VRWM (V)	Breakdown Voltage VBR (V) Min. @IT	Breakdown Voltage VBR (V) Max. @IT	Test Current IT (mA)	Maximum Clamping Voltage @IPP VC (V)	Peak Pulse Current Ipp (A)	Reverse Leakage @VRWM IR (uA)
SMDJ5.0CA	SMDJ5.0CA	5.00	6.40	7.00	10.00	9.20	326.1	800
SMDJ6.0CA	SMDJ6.0CA	6.00	6.67	7.37	10.00	10.30	291.3	800
SMDJ6.5CA	SMDJ6.5CA	6.50	7.22	7.98	10.00	11.20	267.9	500
SMDJ7.0CA	SMDJ7.0CA	7.00	7.78	8.60	10.00	12.00	250.0	200
SMDJ7.5CA	SMDJ7.5CA	7.50	8.33	9.21	1.00	12.90	232.6	100
SMDJ8.0CA	SMDJ8.0CA	8.00	8.89	9.83	1.00	13.60	220.6	50
SMDJ8.5CA	SMDJ8.5CA	8.50	9.44	10.40	1.00	14.40	208.3	20
SMDJ9.0CA	SMDJ9.0CA	9.00	10.00	11.10	1.00	15.40	194.8	10
SMDJ10CA	SMDJ10CA	10.00	11.10	12.30	1.00	17.00	176.5	1
SMDJ11CA	SMDJ11CA	11.00	12.20	13.50	1.00	18.20	164.8	1
SMDJ12CA	SMDJ12CA	12.00	13.30	14.70	1.00	19.90	150.8	1
SMDJ13CA	SMDJ13CA	13.00	14.40	15.90	1.00	21.50	139.5	1
SMDJ14CA	SMDJ14CA	14.00	15.60	17.20	1.00	23.20	129.3	1
SMDJ15CA	SMDJ15CA	15.00	16.70	18.50	1.00	24.40	123.0	1
SMDJ16CA	SMDJ16CA	16.00	17.80	19.70	1.00	26.00	115.4	1
SMDJ17CA	SMDJ17CA	17.00	18.90	20.90	1.00	27.60	108.7	1
SMDJ18CA	SMDJ18CA	18.00	20.00	22.10	1.00	29.20	102.7	1
SMDJ20CA	SMDJ20CA	20.00	22.20	24.50	1.00	32.40	92.6	1
SMDJ22CA	SMDJ22CA	22.00	24.40	26.90	1.00	35.50	84.5	1
SMDJ24CA	SMDJ24CA	24.00	26.70	29.50	1.00	38.90	77.1	1
SMDJ26CA	SMDJ26CA	26.00	28.90	31.90	1.00	42.10	71.3	1
SMDJ28CA	SMDJ28CA	28.00	31.10	34.40	1.00	45.40	66.1	1
SMDJ30CA	SMDJ30CA	30.00	33.30	36.80	1.00	48.40	62.0	1
SMDJ33CA	SMDJ33CA	33.00	36.70	40.60	1.00	53.30	56.3	1
SMDJ36CA	SMDJ36CA	36.00	40.00	44.20	1.00	58.10	51.6	1
SMDJ40CA	SMDJ40CA	40.00	44.40	49.10	1.00	64.50	46.5	1
SMDJ43CA	SMDJ43CA	43.00	47.80	52.80	1.00	69.40	43.2	1
SMDJ45CA	SMDJ45CA	45.00	50.00	55.30	1.00	72.70	41.3	1
SMDJ48CA	SMDJ48CA	48.00	53.30	58.90	1.00	77.40	38.8	1
SMDJ51CA	SMDJ51CA	51.00	56.70	62.70	1.00	82.40	36.4	1
SMDJ54CA	SMDJ54CA	54.00	60.00	66.30	1.00	87.10	34.4	1
SMDJ58CA	SMDJ58CA	58.00	64.40	71.20	1.00	93.60	32.1	1
SMDJ60CA	SMDJ60CA	60.00	66.70	73.70	1.00	96.80	31.0	1
SMDJ64CA	SMDJ64CA	64.00	71.10	78.60	1.00	103.00	29.1	1
SMDJ70CA	SMDJ70CA	70.00	77.80	86.00	1.00	113.00	26.5	1
SMDJ75CA	SMDJ75CA	75.00	83.30	92.10	1.00	121.00	24.8	1
SMDJ78CA	SMDJ78CA	78.00	86.70	95.80	1.00	126.00	23.8	1
SMDJ85CA	SMDJ85CA	85.00	94.40	104.00	1.00	137.00	21.9	1
SMDJ90CA	SMDJ90CA	90.00	100.00	111.00	1.00	146.00	20.5	1
SMDJ100CA	SMDJ100CA	100.00	111.00	123.00	1.00	162.00	18.5	1
SMDJ110CA	SMDJ110CA	110.00	122.00	135.00	1.00	177.00	16.9	1
SMDJ120CA	SMDJ120CA	120.00	133.00	147.00	1.00	193.00	15.5	1
SMDJ130CA	SMDJ130CA	130.00	144.00	159.00	1.00	209.00	14.4	1
SMDJ150CA	SMDJ150CA	150.00	167.00	185.00	1.00	243.00	12.3	1
SMDJ160CA	SMDJ160CA	160.00	178.00	197.00	1.00	259.00	11.6	1
SMDJ170CA	SMDJ170CA	170.00	189.00	209.00	1.00	275.00	10.9	1
SMDJ180CA	SMDJ180CA	180.00	198.00	221.00	1.00	291.00	10.3	1
SMDJ190CA	SMDJ190CA	190.00	209.00	233.00	1.00	307.00	9.8	1
SMDJ200CA	SMDJ200CA	200.00	220.00	246.00	1.00	324.00	9.3	1
SMDJ220CA	SMDJ220CA	220.00	246.00	272.00	1.00	356.00	8.4	1
SMDJ250CA	SMDJ250CA	250.00	279.00	309.00	1.00	405.00	7.4	1

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1-Peak Pulse Power Rating Curve

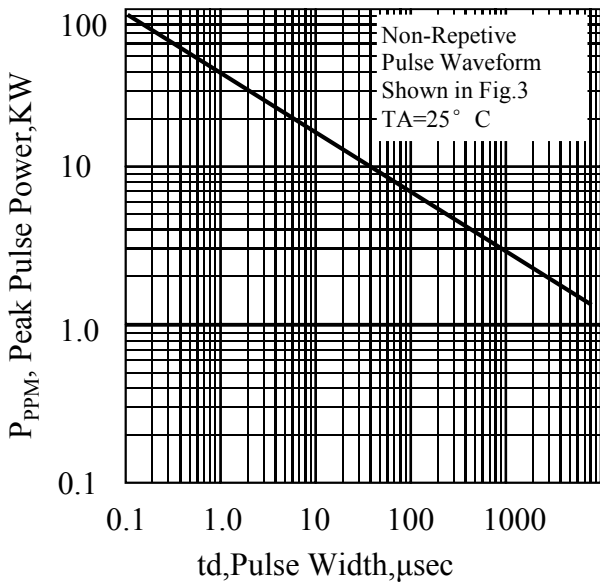


Fig. 2-Pulse Derating Curve

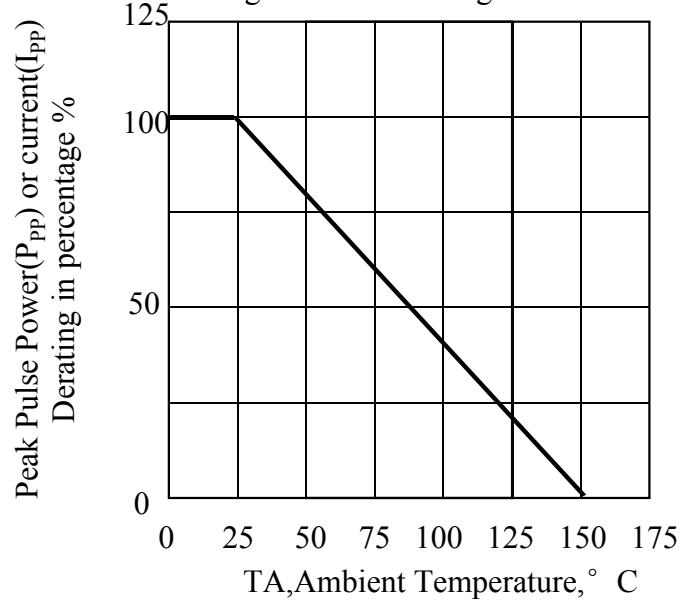


Fig. 3-Pulse Waveform

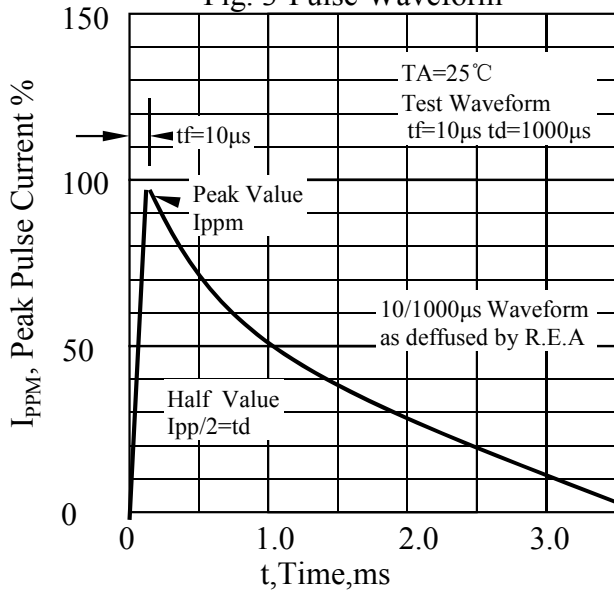
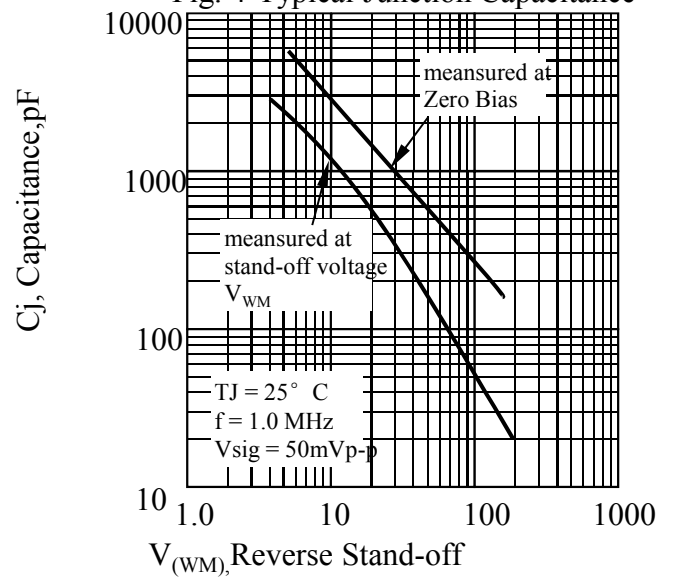
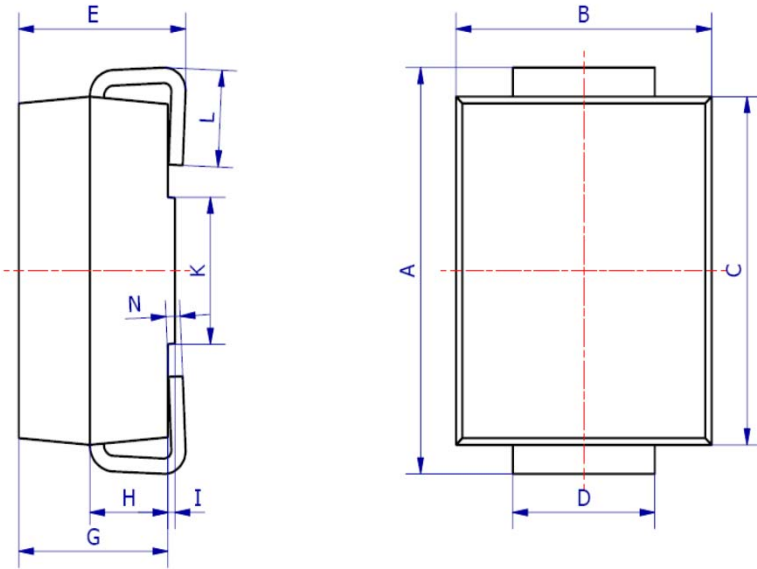


Fig. 4-Typical Junction Capacitance

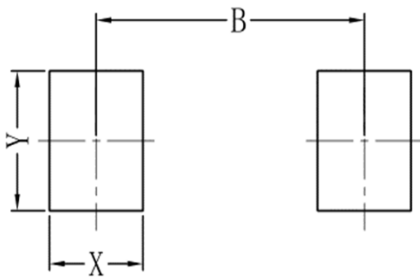


6. OUTLINE AND DIMENSIONS



SMC			
DIM	Min	Max	Typ.
A	7.70	8.30	8.00
B	5.85	6.25	6.05
C	6.65	7.05	6.85
D	2.80	3.20	3.00
E	2.45	2.85	2.65
G	2.10	2.50	2.30
H	1.00	1.40	1.20
I	0.05	0.15	0.10
K	4.30	4.70	4.50
L	1.00	1.50	1.25
N	0.10	0.30	0.20
All Dimensions in mm			

7. SOLDERING FOOTPRINT



SMC	
DIM	(mm)
X	1.60
Y	3.30
B	6.60