

VOLTAGE 11 TO 170 Volts,5000 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 1uA 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: With 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	VALUE	UNITS
Peak Power Dissipation at T _A =25°C, T _P =1ms(Note 1)	Minimum5000	Watts
Steady State Power Dissipation at T _L =75°C(Note 2)	6.5	Watts
Operating Temperature Range	-55 to +150	°C
Storage Temperature Range	-55 to +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above TA=25°C per Fig. 2.
2. Mounted on 0.31 x 0.31" (8.0 x 8.0mm) copper pads to each terminal.

Uni-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)
5.0SMDJ11A	5.0SMDJ11A	11	12.2	13.5	10	18.2	275.0	800
5.0SMDJ12A	5.0SMDJ12A	12	13.3	14.7	10	19.9	252.0	800
5.0SMDJ13A	5.0SMDJ13A	13	14.4	15.9	10	21.5	233.0	500
5.0SMDJ14A	5.0SMDJ14A	14	15.6	17.2	10	23.2	216.0	200
5.0SMDJ15A	5.0SMDJ15A	15	16.7	18.5	1	24.4	205.0	100
5.0SMDJ16A	5.0SMDJ16A	16	17.8	19.7	1	26	193.0	50
5.0SMDJ17A	5.0SMDJ17A	17	18.9	20.9	1	27.6	181.0	20
5.0SMDJ18A	5.0SMDJ18A	18	20	22.1	1	29.2	172.0	10
5.0SMDJ20A	5.0SMDJ20A	20	22.2	24.5	1	32.4	155.0	5
5.0SMDJ22A	5.0SMDJ22A	22	24.4	26.9	1	35.5	141.0	5
5.0SMDJ24A	5.0SMDJ24A	24	26.7	29.5	1	38.9	129.0	2
5.0SMDJ26A	5.0SMDJ26A	26	28.9	31.9	1	42.1	119.0	2
5.0SMDJ28A	5.0SMDJ28A	28	31.1	34.4	1	45.4	110.0	2
5.0SMDJ30A	5.0SMDJ30A	30	33.3	36.8	1	48.4	103.0	2
5.0SMDJ33A	5.0SMDJ33A	33	36.7	40.6	1	53.3	93.9	2
5.0SMDJ36A	5.0SMDJ36A	36	40	44.2	1	58.1	86.1	2
5.0SMDJ40A	5.0SMDJ40A	40	44.4	49.1	1	64.5	77.6	2
5.0SMDJ43A	5.0SMDJ43A	43	47.8	52.8	1	69.4	72.1	2
5.0SMDJ45A	5.0SMDJ45A	45	50	55.3	1	72.7	68.8	2
5.0SMDJ48A	5.0SMDJ48A	48	53.3	58.9	1	77.4	64.7	2
5.0SMDJ51A	5.0SMDJ51A	51	56.7	62.7	1	82.4	60.7	2
5.0SMDJ54A	5.0SMDJ54A	54	60	66.3	1	87.1	57.5	2
5.0SMDJ58A	5.0SMDJ58A	58	64.4	71.2	1	93.6	53.5	2
5.0SMDJ60A	5.0SMDJ60A	60	66.7	73.7	1	96.8	51.7	2
5.0SMDJ64A	5.0SMDJ64A	64	71.1	78.6	1	103	48.6	2
5.0SMDJ70A	5.0SMDJ70A	70	77.8	86	1	113	44.3	2
5.0SMDJ75A	5.0SMDJ75A	75	83.3	92.1	1	121	41.4	2
5.0SMDJ78A	5.0SMDJ78A	78	86.7	95.8	1	126	39.7	2
5.0SMDJ85A	5.0SMDJ85A	85	94.4	104	1	137	36.5	2
5.0SMDJ90A	5.0SMDJ90A	90	100	111	1	146	34.3	2
5.0SMDJ100A	5.0SMDJ100A	100	111	123	1	162	30.9	2
5.0SMDJ110A	5.0SMDJ110A	110	122	135	1	177	28.3	2
5.0SMDJ120A	5.0SMDJ120A	120	133	147	1	193	26.0	2
5.0SMDJ130A	5.0SMDJ130A	130	144	159	1	209	24.0	2
5.0SMDJ150A	5.0SMDJ150A	150	167	185	1	243	20.6	2
5.0SMDJ160A	5.0SMDJ160A	160	178	197	1	259	19.3	2
5.0SMDJ170A	5.0SMDJ170A	170	189	209	1	275	18.2	2

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1-Peak Pulse Power Rating Curve

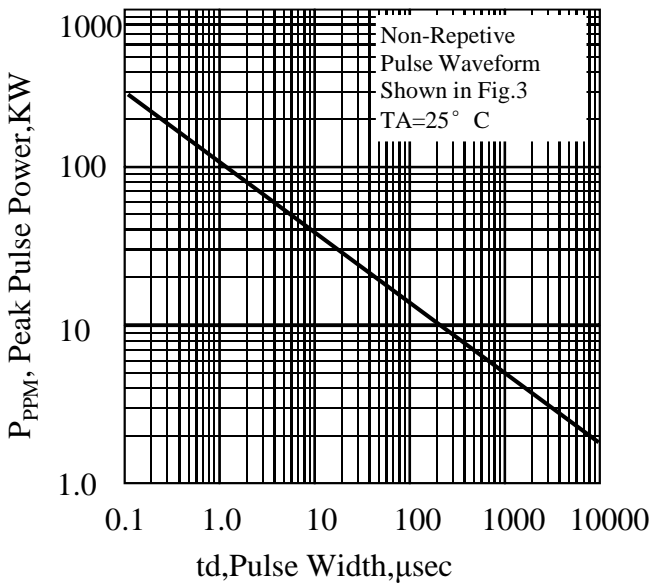


Fig. 2-Pulse Derating Curve

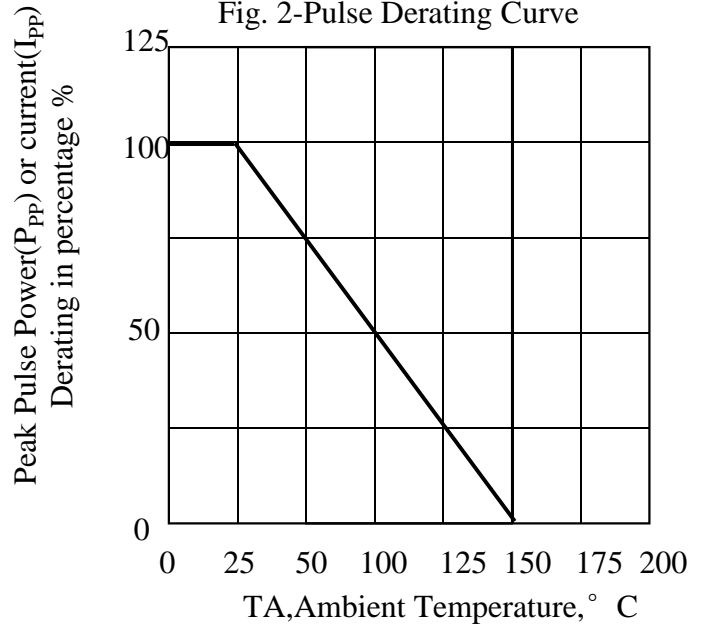
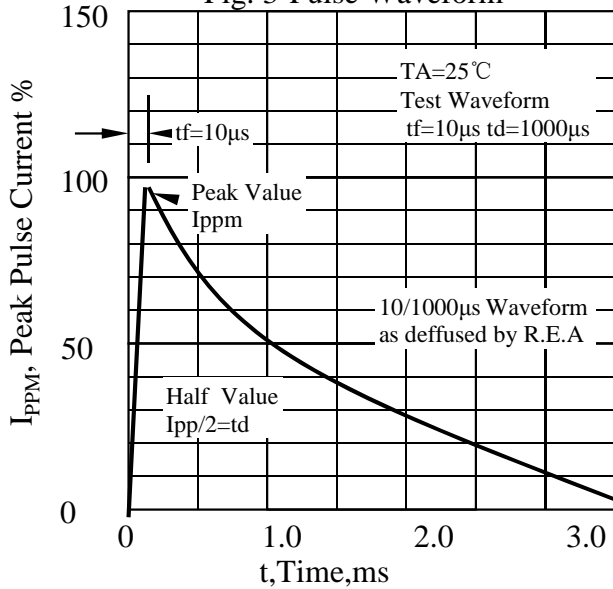
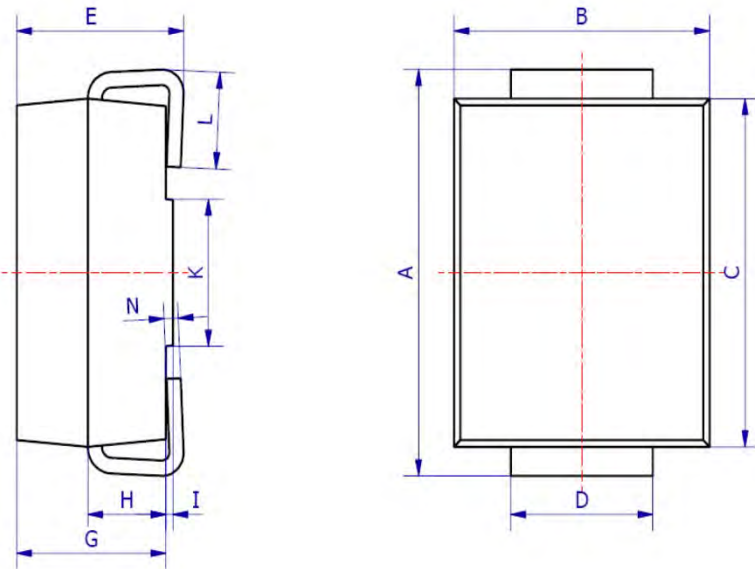


Fig. 3-Pulse Waveform

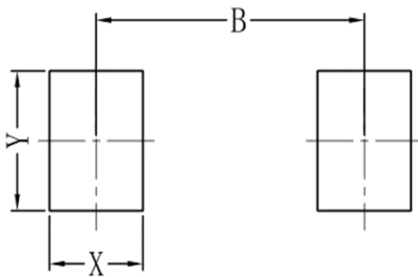


6.OUTLINE AND DIMENSIONS



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