

Surface mount transient voltage suppressor power 1100 watts
Stand-Off Voltage: 300V~400V

FEATURES

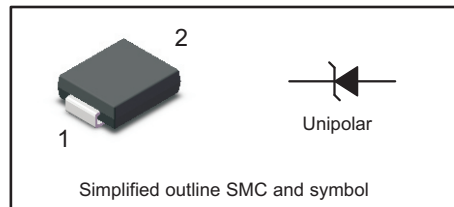
- For surface mounted applications in order to optimize board space.
- Low profile package
- Glass passivated junction
- Excellent clamping capability
- Low incremental surge resistance

MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g (0.0077oz)

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000 us waveform	P_{PPM}	1100	W
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200	A
Power dissipation on Infinite heat sink at $T_A=50^{\circ}\text{C}$	P_D	6.5	W
Maximum instantaneous forward voltage at 100 A for unidirectional only	V_F	3.5	V
Peak Pulse Current on 10/1000 us waveform	I_{PPM}	See Next Table	A
Typical Thermal Resistance Junction to Ambient(Note 1)	$R_{\theta JA}$	37	$^{\circ}\text{C/W}$
Operating Junction Temperature and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

NOTES:

1. P.C.B. mounted with 1.5" X 1.5" (3.8 X 3.8 cm) copper pad areas.



Characteristics at Ta = 25°C

Table 1

Type	Marking	V _{RWM}	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current
			V _{BR} @ I _T					
			Min	Max	I _T	I _R @ V _{RWM}	V _C @ I _{PP}	I _{PP}
UNI	UNI	V	V	V	mA	μA	V	A
1.1SMCJ300A	GJE	300	335	371	1	1	486	2.3
1.1SMCJ400A	GJK	400	447	494	1	1	648	1.7

Fig.1 Peak Pulse Power Rating Curve

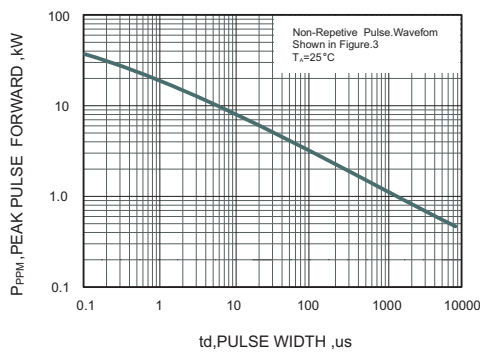


Fig.2 Forward Current Derating Curve

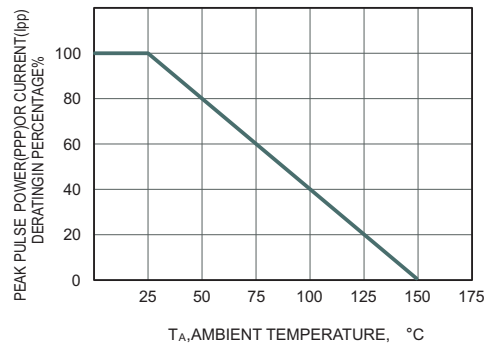


Fig.3 Pulse Waveform

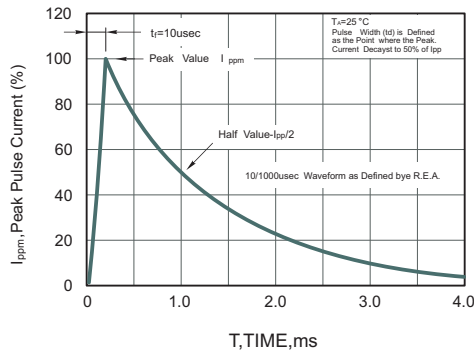
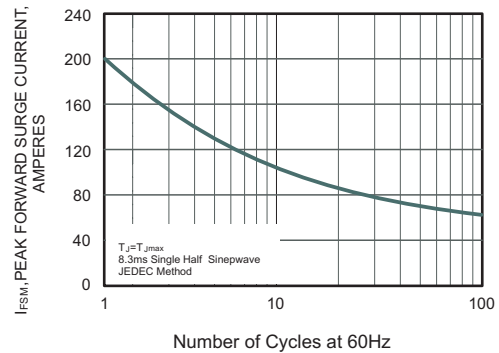


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

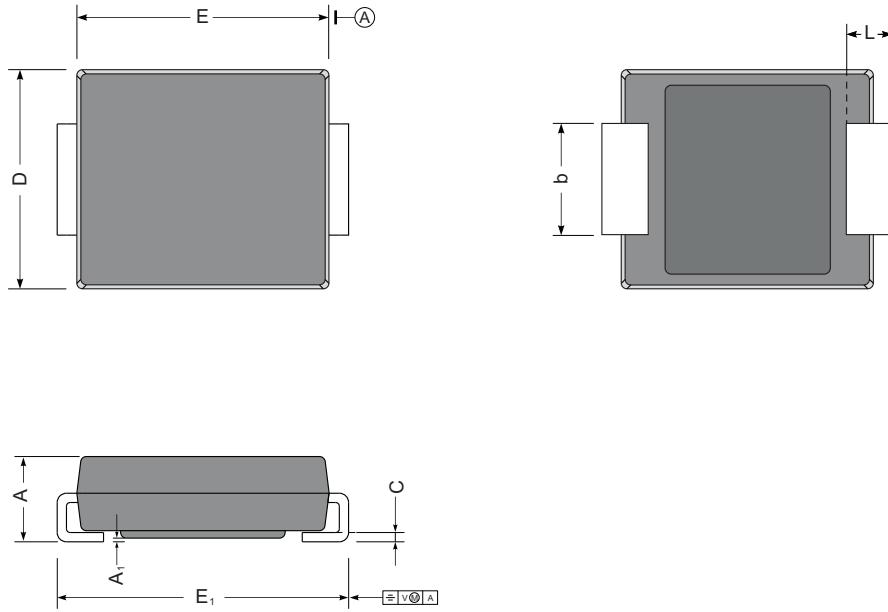




PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

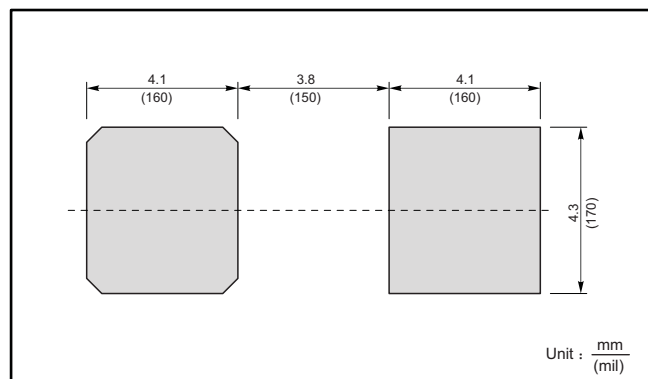
SMC



SMC mechanical data

UNIT		A	E	D	E ₁	A ₁	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108

The recommended mounting pad size





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