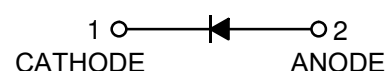
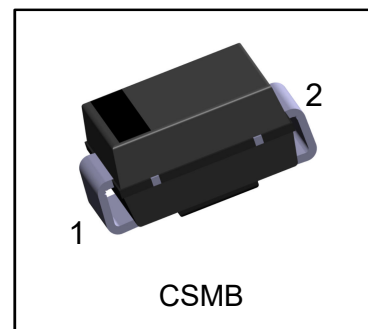


S-CSMBJ***A

Surface Mount Transient Voltage Suppressor
Voltage 5.0 to 250 V, 600 W Peak Pulse Power

1. FEATURES

- 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,
- We declare that the material of product complies with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Weight: 0.11g



2.MECHANICAL DATA

Case: Epoxy, Molded DO-214AA

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

Polarity: Color band denotes cathode end.

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}	600	Watts
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ (Note 2)	P_{MAV}	3.0	Watts
Peak Forward Surge Current at 8.3ms Single Half Sine-wave Superimposed on Rated Load (JECEC Method) (Note 3)	I_{FSM}	100	Amps
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	°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 Copper Leaf area of 1.57in^2 (40mm^2).

3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Uni-Directional Part Number	Device marking	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)
S-CSMBJ3.3A	SMBJ3.3A	3.3	4.1	-	10	7.3	50	200
S-CSMBJ5.0A	SMBJ5.0A	5	6.4	7	10	9.2	65.3	800
S-CSMBJ6.0A	SMBJ6.0A	6	6.67	7.37	10	10.3	58.3	800
S-CSMBJ6.5A	SMBJ6.5A	6.5	7.22	7.98	10	11.2	53.6	500
S-CSMBJ7.0A	SMBJ7.0A	7	7.78	8.6	10	12	50	200
S-CSMBJ7.5A	SMBJ7.5A	7.5	8.33	9.21	1	12.9	46.6	100
S-CSMBJ8.0A	SMBJ8.0A	8	8.89	9.83	1	13.6	44.2	50
S-CSMBJ8.5A	SMBJ8.5A	8.5	9.44	10.4	1	14.4	41.7	20
S-CSMBJ9.0A	SMBJ9.0A	9	10	11.1	1	15.4	39	10
S-CSMBJ10A	SMBJ10A	10	11.1	12.3	1	17	35.3	1
S-CSMBJ11A	SMBJ11A	11	12.2	13.5	1	18.2	33	1
S-CSMBJ12A	SMBJ12A	12	13.3	14.7	1	19.9	30.2	1
S-CSMBJ13A	SMBJ13A	13	14.4	15.9	1	21.5	28	1
S-CSMBJ14A	SMBJ14A	14	15.6	17.2	1	23.2	25.9	1
S-CSMBJ15A	SMBJ15A	15	16.7	18.5	1	24.4	24.6	1
S-CSMBJ16A	SMBJ16A	16	17.8	19.7	1	26	23.1	1
S-CSMBJ17A	SMBJ17A	17	18.9	20.9	1	27.6	21.8	1
S-CSMBJ18A	SMBJ18A	18	20	22.1	1	29.2	20.6	1
S-CSMBJ20A	SMBJ20A	20	22.2	24.5	1	32.4	18.6	1
S-CSMBJ22A	SMBJ22A	22	24.4	26.9	1	35.5	16.9	1
S-CSMBJ24A	SMBJ24A	24	26.7	29.5	1	38.9	15.5	1
S-CSMBJ26A	SMBJ26A	26	28.9	31.9	1	42.1	14.3	1
S-CSMBJ28A	SMBJ28A	28	31.1	34.4	1	45.4	13.3	1
S-CSMBJ30A	SMBJ30A	30	33.3	36.8	1	48.4	12.4	1
S-CSMBJ33A	SMBJ33A	33	36.7	40.6	1	53.3	11.3	1
S-CSMBJ36A	SMBJ36A	36	40	44.2	1	58.1	10.4	1
S-CSMBJ40A	SMBJ40A	40	44.4	49.1	1	64.5	9.3	1
S-CSMBJ43A	SMBJ43A	43	47.8	52.8	1	69.4	8.7	1
S-CSMBJ45A	SMBJ45A	45	50	55.3	1	72.7	8.3	1
S-CSMBJ48A	SMBJ48A	48	53.3	58.9	1	77.4	7.8	1
S-CSMBJ51A	SMBJ51A	51	56.7	62.7	1	82.4	7.3	1
S-CSMBJ54A	SMBJ54A	54	60	66.3	1	87.1	6.9	1
S-CSMBJ58A	SMBJ58A	58	64.4	71.2	1	93.6	6.5	1
S-CSMBJ60A	SMBJ60A	60	66.7	73.7	1	96.8	6.2	1
S-CSMBJ64A	SMBJ64A	64	71.1	78.6	1	103	5.9	1
S-CSMBJ70A	SMBJ70A	70	77.8	86	1	113	5.3	1
S-CSMBJ75A	SMBJ75A	75	83.3	92.1	1	121	5	1
S-CSMBJ78A	SMBJ78A	78	86.7	95.8	1	126	4.8	1
S-CSMBJ85A	SMBJ85A	85	94.4	104	1	137	4.4	1
S-CSMBJ90A	SMBJ90A	90	100	111	1	146	4.1	1
S-CSMBJ100A	SMBJ100A	100	111	123	1	162	3.7	1
S-CSMBJ110A	SMBJ110A	110	122	135	1	177	3.4	1
S-CSMBJ120A	SMBJ120A	120	133	147	1	193	3.1	1
S-CSMBJ130A	SMBJ130A	130	144	159	1	209	2.9	1
S-CSMBJ150A	SMBJ150A	150	167	185	1	243	2.5	1
S-CSMBJ160A	SMBJ160A	160	178	197	1	259	2.3	1
S-CSMBJ170A	SMBJ170A	170	189	209	1	275	2.2	1
S-CSMBJ180A	SMBJ180A	180	198	221	1	291	2.1	1
S-CSMBJ190A	SMBJ190A	190	209	233	1	307	2	1
S-CSMBJ200A	SMBJ200A	200	220	246	1	324	1.9	1
S-CSMBJ220A	SMBJ220A	220	246	272	1	356	1.7	1
S-CSMBJ250A	SMBJ250A	250	279	309	1	405	1.5	1

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1-Peak Pulse Power Rating Curve

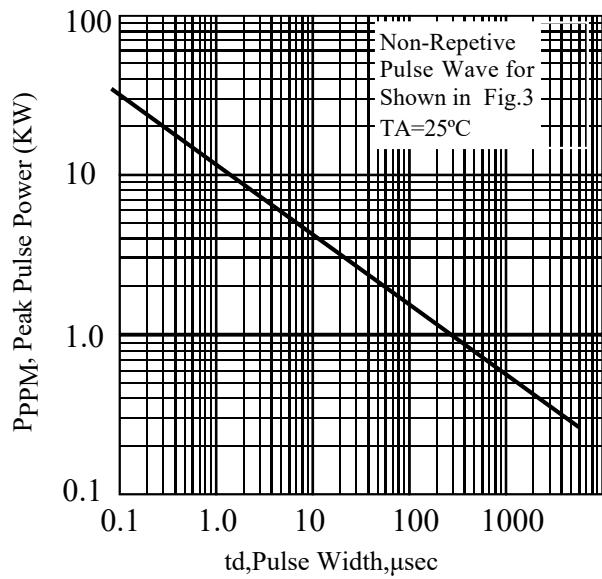


Fig. 2-Pulse Derating Curve

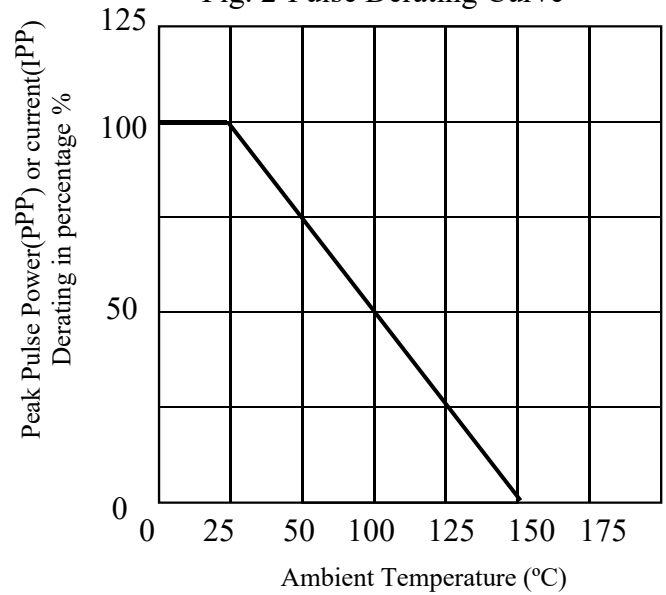


Fig. 3-Typical Instantaneous Forward Characteristics

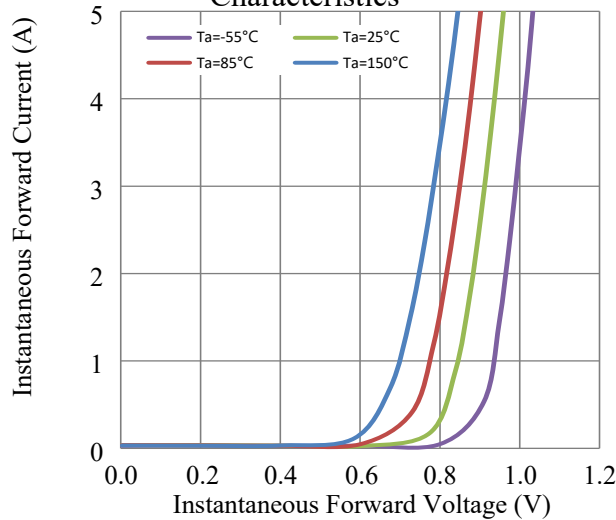


Fig. 4-Typical Reverse Characteristics

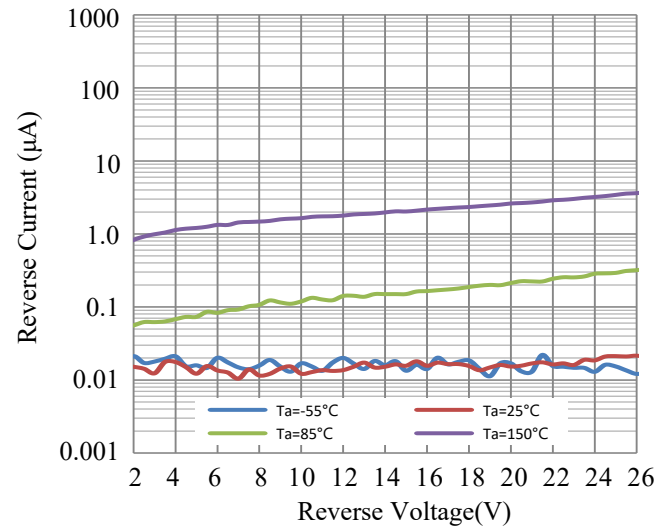


Fig. 5-Pulse Waveform

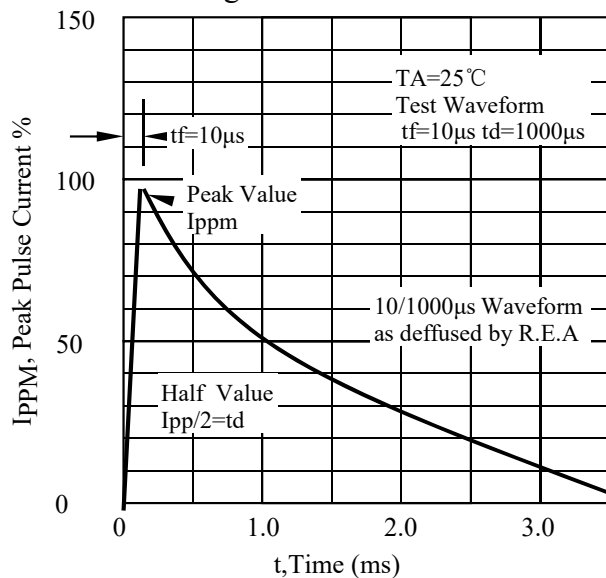
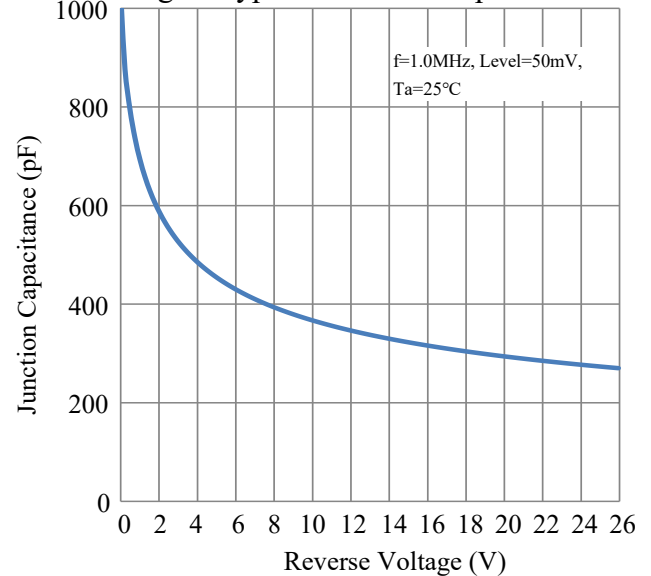
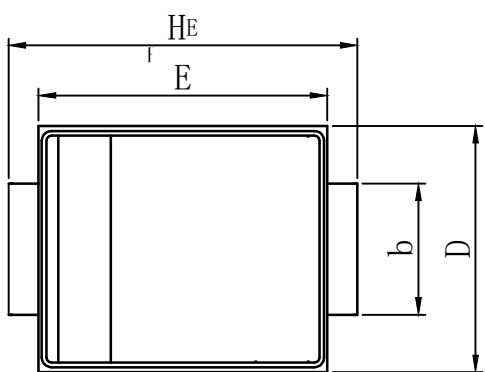
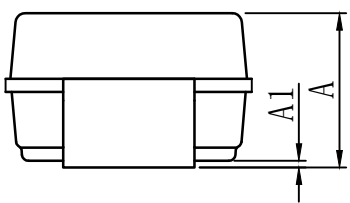
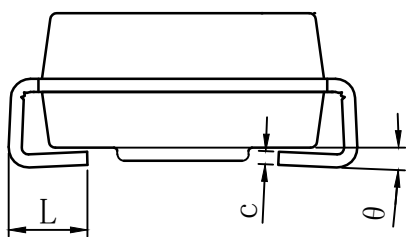


Fig. 6-Typical Junction Capacitance

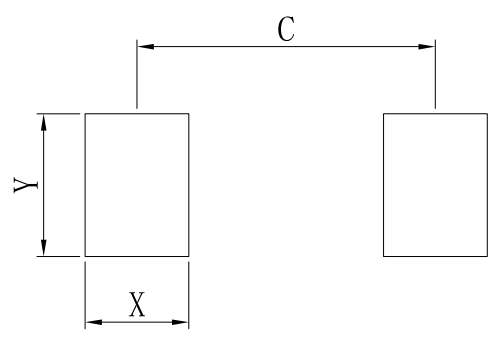


6. OUTLINE AND DIMENSIONS



CSMB			
DIM	MIN	TYP	MAX
A	2.20	2.35	2.50
A1	0.05	0.10	0.20
b	1.80	2.00	2.20
c	0.10	0.20	0.30
D	3.30	3.75	3.94
E	4.06	4.40	4.60
HE	5.20	5.31	5.45
L	0.90	1.30	1.60
θ	0°	~	8°
All Dimensions in mm			

7. SOLDERING FOOTPRINT



CSMB	
DIM	(mm)
X	1.60
Y	2.20
C	4.60

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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