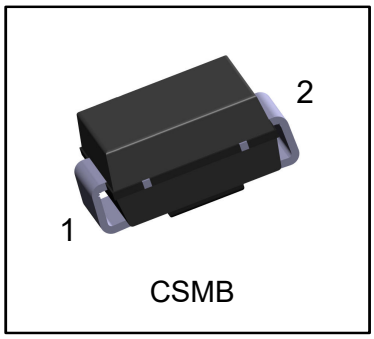
S-CSMBJ***CA

Surface Mount Transient Voltage Suppressors
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 compliance 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.
- MSL: Level 1

2.MECHANICAL DATA

Case: Epoxy, Molded JEDEC DO-214AA
Terminals: Plated leads, solderable per MIL-STD-202, Method 208
Polarity: Without Color band denoted cathode
Mounting Position: Any
Weight: 0.11g
Quantity: 3500 Units / Tape&Reel

3. MAXIMUM RATINGS (Ta = 25ºC unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETERS	SYMBOLS	VALUE	UNITS
Peak Power Dissipation at T_A=25°C, T_P=1ms(Note 1)	P_{PPM}	600	W
Steady State Power Dissipation at T_L=75°C(Note 2)	$P_{M(AV)}$	3.0	W
Thermal Resistance - Junction to Ambient	$R_{\theta JA}$	160	°C/W
Thermal Resistance - Junction to Case	$R_{\theta JC}$	50	°C/W
Operating Junction 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 TA=25°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.

S-CSMBJ***CA

Bidirectional-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-CSMBJ5.0CA	SMBJ5.0CA	5	6.4	7	10	9.2	65.3	800
S-CSMBJ6.0CA	SMBJ6.0CA	6	6.67	7.37	10	10.3	58.3	800
S-CSMBJ6.5CA	SMBJ6.5CA	6.5	7.22	7.98	10	11.2	53.6	500
S-CSMBJ7.0CA	SMBJ7.0CA	7	7.78	8.6	10	12	50	200
S-CSMBJ7.5CA	SMBJ7.5CA	7.5	8.33	9.21	1	12.9	46.6	100
S-CSMBJ8.0CA	SMBJ8.0CA	8	8.89	9.83	1	13.6	44.2	50
S-CSMBJ8.5CA	SMBJ8.5CA	8.5	9.44	10.4	1	14.4	41.7	20
S-CSMBJ9.0CA	SMBJ9.0CA	9	10	11.1	1	15.4	39	10
S-CSMBJ10CA	SMBJ10CA	10	11.1	12.3	1	17	35.3	1
S-CSMBJ11CA	SMBJ11CA	11	12.2	13.5	1	18.2	33	1
S-CSMBJ12CA	SMBJ12CA	12	13.3	14.7	1	19.9	30.2	1
S-CSMBJ13CA	SMBJ13CA	13	14.4	15.9	1	21.5	28	1
S-CSMBJ14CA	SMBJ14CA	14	15.6	17.2	1	23.2	25.9	1
S-CSMBJ15CA	SMBJ15CA	15	16.7	18.5	1	24.4	24.6	1
S-CSMBJ16CA	SMBJ16CA	16	17.8	19.7	1	26	23.1	1
S-CSMBJ17CA	SMBJ17CA	17	18.9	20.9	1	27.6	21.8	1
S-CSMBJ18CA	SMBJ18CA	18	20	22.1	1	29.2	20.6	1
S-CSMBJ20CA	SMBJ20CA	20	22.2	24.5	1	32.4	18.6	1
S-CSMBJ22CA	SMBJ22CA	22	24.4	26.9	1	35.5	16.9	1
S-CSMBJ24CA	SMBJ24CA	24	26.7	29.5	1	38.9	15.5	1
S-CSMBJ26CA	SMBJ26CA	26	28.9	31.9	1	42.1	14.3	1
S-CSMBJ28CA	SMBJ28CA	28	31.1	34.4	1	45.4	13.3	1
S-CSMBJ30CA	SMBJ30CA	30	33.3	36.8	1	48.4	12.4	1
S-CSMBJ33CA	SMBJ33CA	33	36.7	40.6	1	53.3	11.3	1
S-CSMBJ36CA	SMBJ36CA	36	40	44.2	1	58.1	10.4	1
S-CSMBJ40CA	SMBJ40CA	40	44.4	49.1	1	64.5	9.3	1
S-CSMBJ43CA	SMBJ43CA	43	47.8	52.8	1	69.4	8.7	1
S-CSMBJ45CA	SMBJ45CA	45	50	55.3	1	72.7	8.3	1
S-CSMBJ48CA	SMBJ48CA	48	53.3	58.9	1	77.4	7.8	1
S-CSMBJ51CA	SMBJ51CA	51	56.7	62.7	1	82.4	7.3	1
S-CSMBJ54CA	SMBJ54CA	54	60	66.3	1	87.1	6.9	1
S-CSMBJ58CA	SMBJ58CA	58	64.4	71.2	1	93.6	6.5	1
S-CSMBJ60CA	SMBJ60CA	60	66.7	73.7	1	96.8	6.2	1
S-CSMBJ64CA	SMBJ64CA	64	71.1	78.6	1	103	5.9	1
S-CSMBJ70CA	SMBJ70CA	70	77.8	86	1	113	5.3	1
S-CSMBJ75CA	SMBJ75CA	75	83.3	92.1	1	121	5	1
S-CSMBJ78CA	SMBJ78CA	78	86.7	95.8	1	126	4.8	1
S-CSMBJ85CA	SMBJ85CA	85	94.4	104	1	137	4.4	1
S-CSMBJ90CA	SMBJ90CA	90	100	111	1	146	4.1	1
S-CSMBJ100CA	SMBJ100CA	100	111	123	1	162	3.7	1
S-CSMBJ110CA	SMBJ110CA	110	122	135	1	177	3.4	1
S-CSMBJ120CA	SMBJ120CA	120	133	147	1	193	3.1	1
S-CSMBJ130CA	SMBJ130CA	130	144	159	1	209	2.9	1
S-CSMBJ150CA	SMBJ150CA	150	167	185	1	243	2.5	1
S-CSMBJ160CA	SMBJ160CA	160	178	197	1	259	2.3	1
S-CSMBJ170CA	SMBJ170CA	170	189	209	1	275	2.2	1
S-CSMBJ180CA	SMBJ180CA	180	198	221	1	291	2.1	1
S-CSMBJ190CA	SMBJ190CA	190	209	233	1	307	2	1
S-CSMBJ200CA	SMBJ200CA	200	220	246	1	324	1.9	1
S-CSMBJ220CA	SMBJ220CA	220	246	272	1	356	1.7	1
S-CSMBJ250CA	SMBJ250CA	250	279	309	1	405	1.5	1

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1-Peak Pulse Power Rating Curve

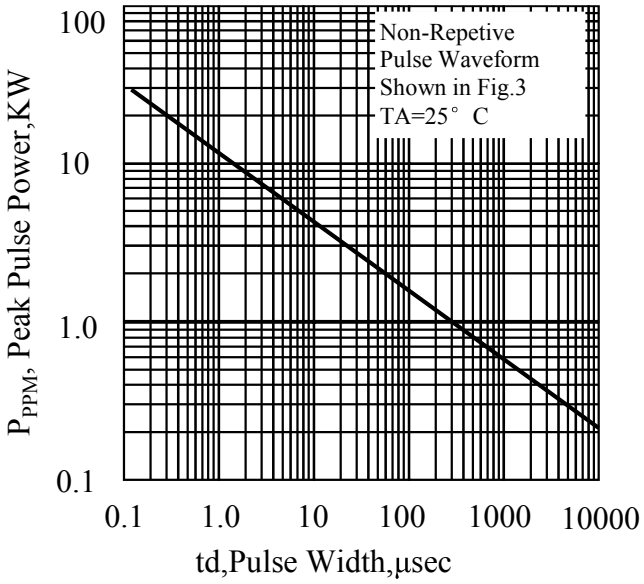


Fig. 2-Pulse Derating Curve

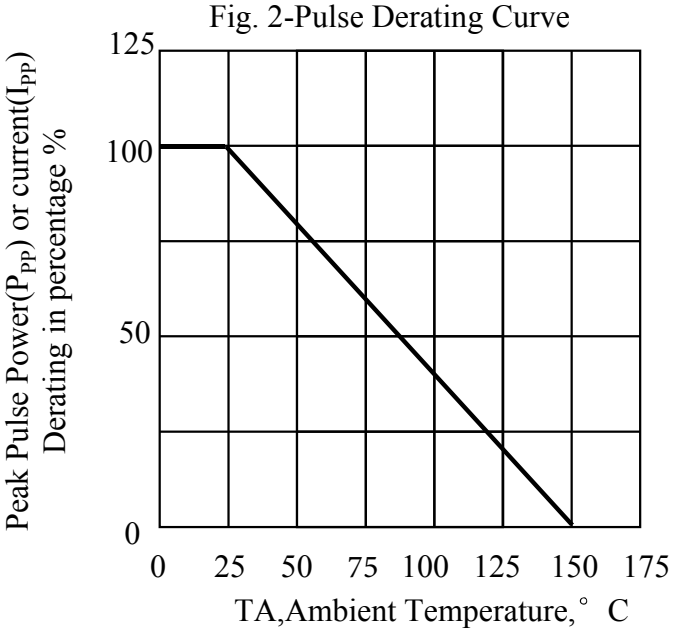


Fig. 3-Pulse Waveform

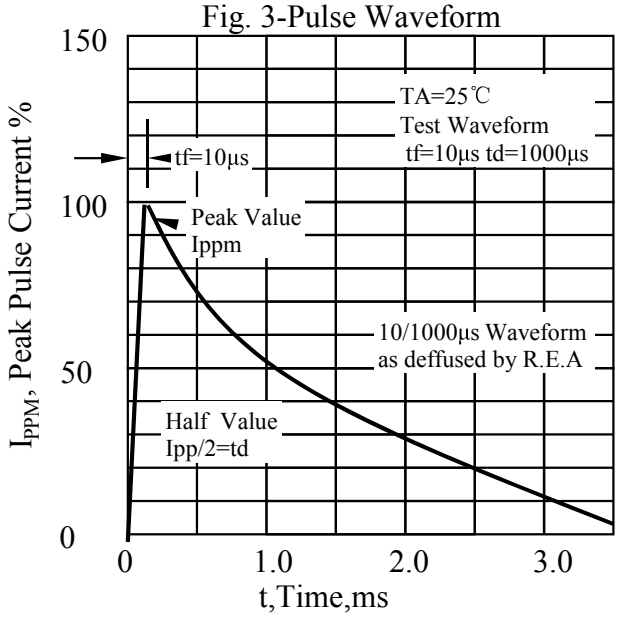
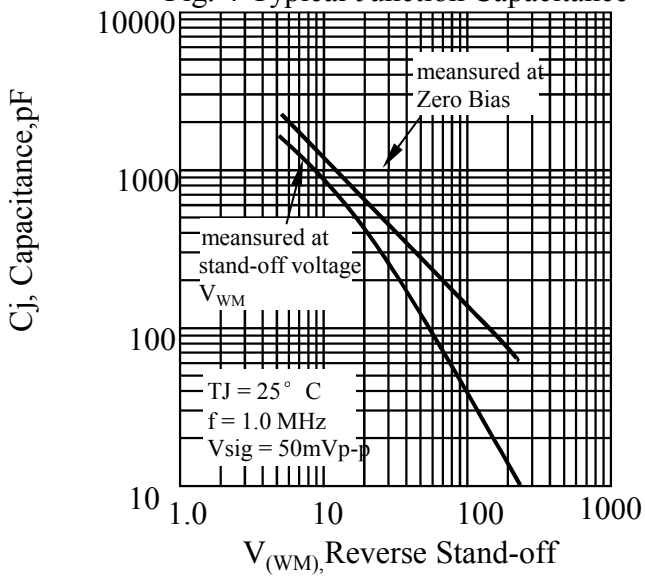
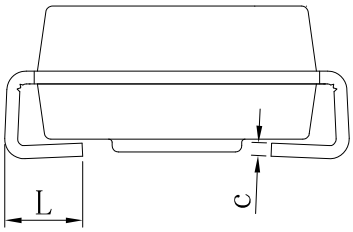
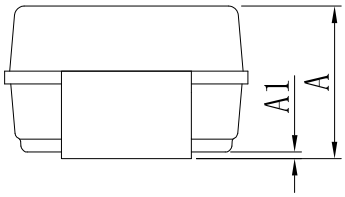


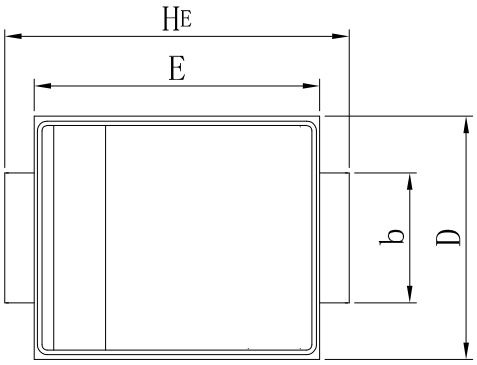
Fig. 4-Typical Junction Capacitance



6. OUTLINE AND DIMENSIONS

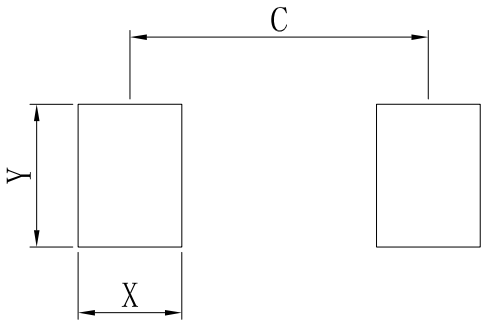






CSMB			
DIM	MIN	TYP	MAX
A	2.20	2.35	2.50
A1	0.05	0.10	0.20
b	1.80	2.00	2.20
c	0.10	0.20	0.30
D	3.30	3.75	3.94
E	4.06	4.40	4.60
HE	5.20	5.31	5.45
L	0.90	1.30	1.60
All Dimensions in mm			

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.

- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC’s Products against warning, caution or note contained in this document.

- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.

单击下面可查看定价，库存，交付和生命周期等信息

>>LRC(乐山无线电)