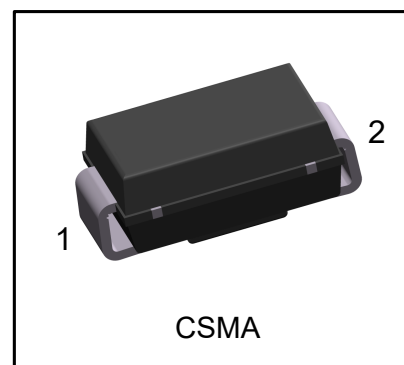


S-CP4SMA***CA

Surface Mount Transient Voltage Suppressors
400 Watt Peak Pulse Power

1. FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- Repetition Rate (duty cycle): 0.01%
- Fast response time:
- Typical IR less than 1mA above 10V
- High temperature soldering guaranteed: 260°C/10 seconds
- We declare that the material of product is compliant with RoHS directive and Halogen Free requirements.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. MECHANICAL DATA

Case: JEDEC DO-214AC, molded plastic over glass die

Terminals: Plated axial leads, solderable per
MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.07g

3. MAXIMUM RATINGS AND CHARACTERISTICS

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%.

PARAMETER	SYMBOL	VALUE	UNITS
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_P=1\text{ms}$ (Note 1)	PPPM	400	W
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ (Note 2)	$P_{M(AV)}$	1.0	W
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note 2)	I_{FSM}	30	A
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

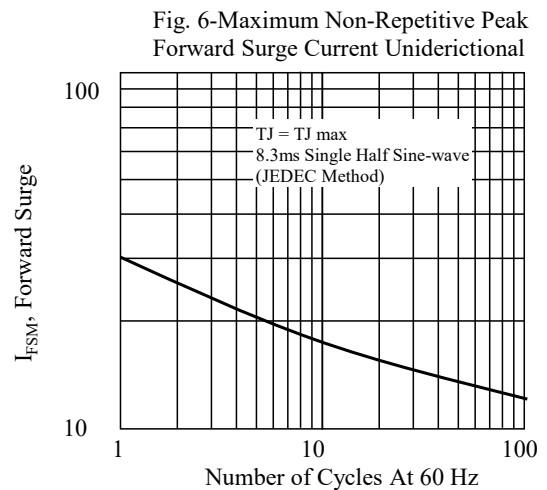
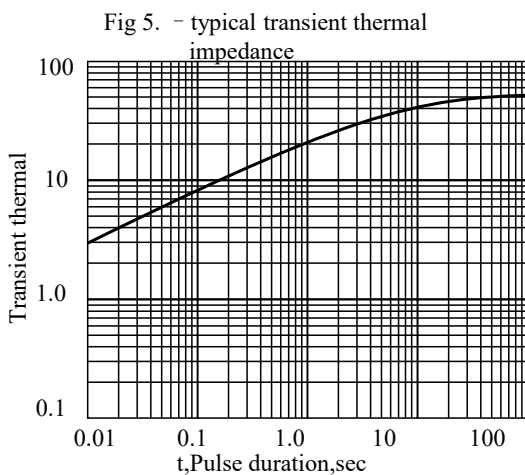
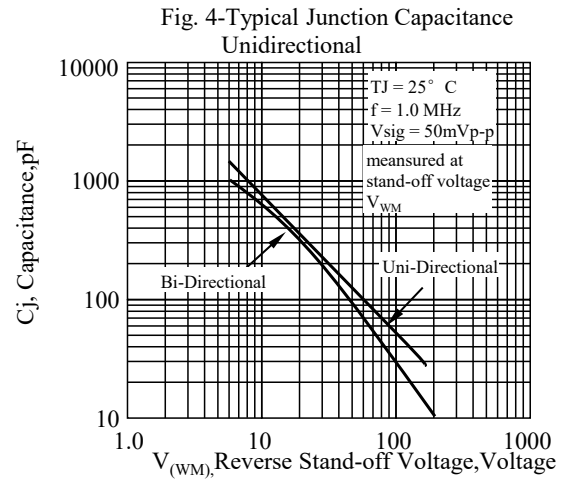
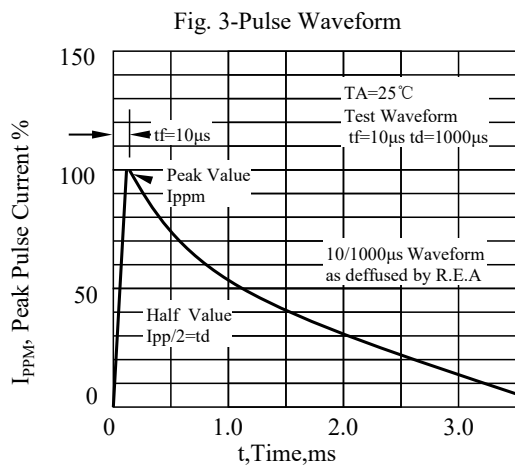
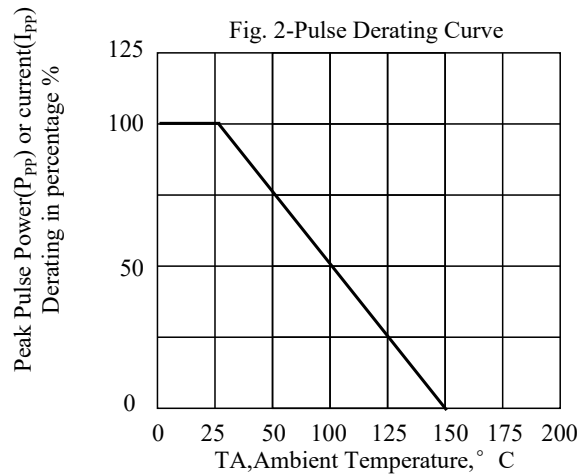
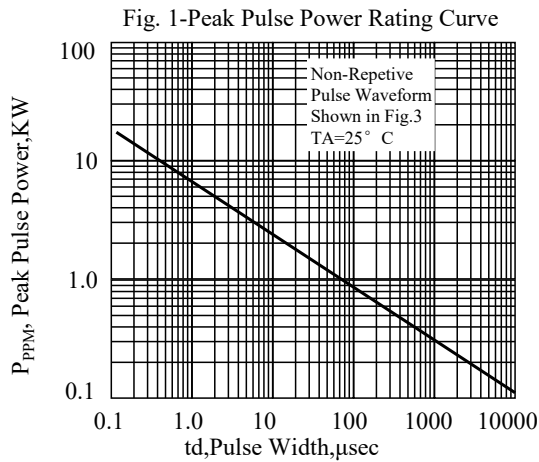
NOTES:

1. Non-repetitive current pulse per Fig. 3 and derated above $T_a=25^\circ\text{C}$ per Fig. 2.
2. Mounted on Copper Leaf area of 1.57in² (40mm²).
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

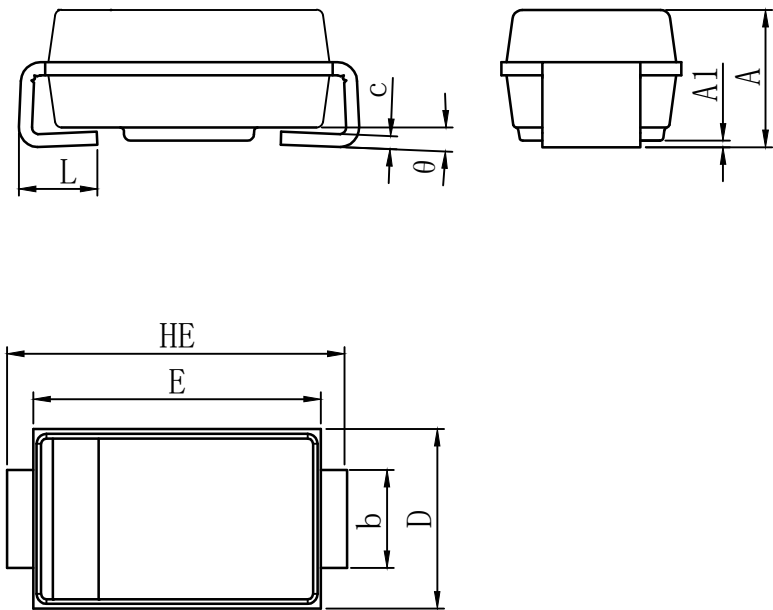
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

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)	Maximumn Clamping Voltage VC (V) @IPP	Peak Pulse Current IPP (A)	Reverse Leakage IR (uA) @VRWM
S-CP4SMA6.8CA	6.8CA	5.8	6.45	7.14	10	10.5	38.1	200
S-CP4SMA7.5CA	7.5CA	6.4	7.13	7.88	10	11.3	35.4	100
S-CP4SMA8.2CA	8.2CA	7.0	7.79	8.61	10	12.1	33.1	100
S-CP4SMA9.1CA	9.1CA	7.8	8.65	9.55	10	13.4	29.9	50
S-CP4SMA10CA	10CA	8.6	9.5	10.5	1	14.5	27.6	10
S-CP4SMA11CA	11CA	9.4	10.5	11.6	1	15.6	25.6	5
S-CP4SMA12CA	12CA	10.2	11.4	12.6	1	16.7	24.0	1
S-CP4SMA13CA	13CA	11.1	12.4	13.7	1	18.2	22.0	1
S-CP4SMA15CA	15CA	12.8	14.3	15.8	1	21.2	18.9	1
S-CP4SMA16CA	16CA	13.6	15.2	16.8	1	22.5	17.8	1
S-CP4SMA18CA	18CA	15.3	17.1	18.9	1	25.2	15.9	1
S-CP4SMA20CA	20CA	17.1	19.0	21.0	1	27.7	14.4	1
S-CP4SMA22CA	22CA	18.8	20.9	23.1	1	30.6	13.1	1
S-CP4SMA24CA	24CA	20.5	22.8	25.2	1	33.2	12.0	1
S-CP4SMA27CA	27CA	23.1	25.7	28.4	1	37.5	10.7	1
S-CP4SMA30CA	30CA	25.6	28.5	31.5	1	41.1	9.7	1
S-CP4SMA33CA	33CA	28.2	31.4	34.7	1	45.7	8.8	1
S-CP4SMA36CA	36CA	30.8	34.2	37.8	1	49.9	8.0	1
S-CP4SMA39CA	39CA	33.3	37.1	41.0	1	53.9	7.4	1
S-CP4SMA43CA	43CA	36.8	40.9	45.2	1	59.3	6.7	1
S-CP4SMA47CA	47CA	40.2	44.7	49.4	1	64.8	6.2	1
S-CP4SMA51CA	51CA	43.6	48.5	53.6	1	70.1	5.7	1
S-CP4SMA56CA	56CA	47.8	53.2	58.8	1	77	5.2	1
S-CP4SMA62CA	62CA	53	58.9	65.1	1	85	4.7	1
S-CP4SMA68CA	68CA	58.1	64.4	71.4	1	92	4.3	1
S-CP4SMA75CA	75CA	64.1	71.3	78.8	1	103	3.9	1
S-CP4SMA82CA	82CA	70.1	77.9	86.1	1	113	3.5	1
S-CP4SMA91CA	91CA	77.8	86.5	95.5	1	125	3.2	1
S-CP4SMA100CA	100CA	85.5	95	105	1	137	2.9	1
S-CP4SMA110CA	110CA	94	105	116	1	152	2.6	1
S-CP4SMA120CA	120CA	102	114	126	1	165	2.4	1
S-CP4SMA130CA	130CA	111	124	137	1	179	2.23	1
S-CP4SMA150CA	150CA	128	143	158	1	207	1.93	1
S-CP4SMA160CA	160CA	136	152	168	1	219	1.83	1
S-CP4SMA170CA	170CA	145	162	179	1	234	1.71	1
S-CP4SMA180CA	180CA	154	171	189	1	246	1.63	1
S-CP4SMA200CA	200CA	171	190	210	1	274	1.46	1

5. ELECTRICAL CHARACTERISTIC CURVES (Ta= 25°C)

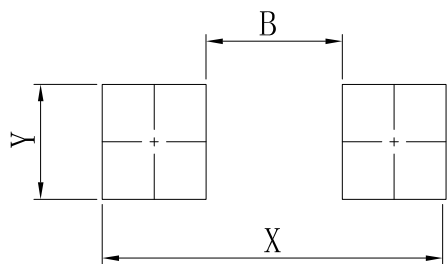


6. OUTLINE AND DIMENSIONS



CSMA			
DIM	MIN	TYP	MAX
A	1.97	2.10	2.29
A1	0.05	0.10	0.20
b	1.35	1.50	1.65
c	0.10	0.20	0.30
D	2.40	2.75	2.92
E	4.10	4.40	4.57
HE	4.70	5.27	5.59
L	0.76	1.20	1.52
θ	0°	~	8°
All Dimensions in mm			

7. SOLDERING FOOTPRINT



CSMA		
DIM	MIN	MAX
X	5.30REF	
Y	1.72	1.82
B	1.90	2.30

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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