Technical Data
Data Sheet N2052, Rev. -

1.5KE530CA
TRANSIENT VOLTAGE SUPPRESSOR

DO-201AD

Features

- Low incremental surge resistance.
- Excellent clamping capability.
- High temperature wave soldering: 265℃/10s at terminals.
- Plastic package has underwriters laboratory flammability 94V-0.
- 1500W peak pulse power capability at 10×1000 μ s waveform.
- Fast response time: typically less than 1.0ps from 0V to VBR min.
- This is a Pb − Free Device
- All SMC Parts are Traceable to the Wafer Lot
- Additional testing can be offered upon request

Circuit Diagram

Mechanical Data

The 1.5KE530CA of high current bi-directional transient suppressors are designed for A.C. line protection and high power DC bus clamping applications. They provide a clamping voltage lower than the avalanche voltage. Therefore, any voltage rise due to increased current conduction is contained to a minimum, providing the best possible protection level. They can also be connected in series and/or parallel to create very high capacity protection solutions.

Absolute Maximum Ratings@T_A=25℃, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation on 10/1000μs waveform	P_{PPM}	1500	W
Steady state power dissipation at T_L=75℃	$P_{M(AV)}$	6.5	W
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	15	°C/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	75	°C/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	°C

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RoHS

Electrical Characteristics @T_A=25°C unless otherwise specified

BI-POLAR	REVERSE STAND-OFF VOLTAGE V_{RWM} (V)	BREAKDOWN VOLTAGE V_{BR} (V) MIN. @I_T	BREAKDOWN VOLTAGE V_{BR} (V) MAX. @I_T	TEST CURRENT I_T(MA)	MAXMUM CLAMPING VOLTAGE @I_{PP} V_C(V)	PEAK PULSE CURRENT I_{PP}(1)(A)	REVERSE LEAKAGE @V_{RWM} I_R(uA)
1.5KE530CA	449	503	557	1	724	2.1	1

Notes: 1. Surge waveform:10/1000μs.

Ratings and Characteristics Curves

FIG.1: Pulse waveform

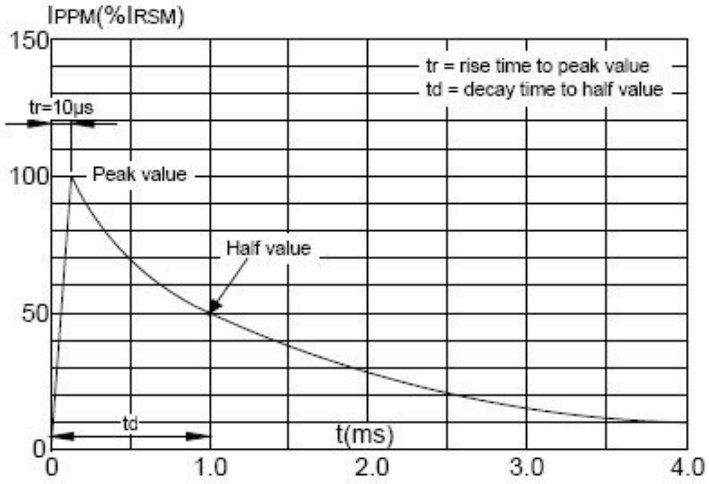
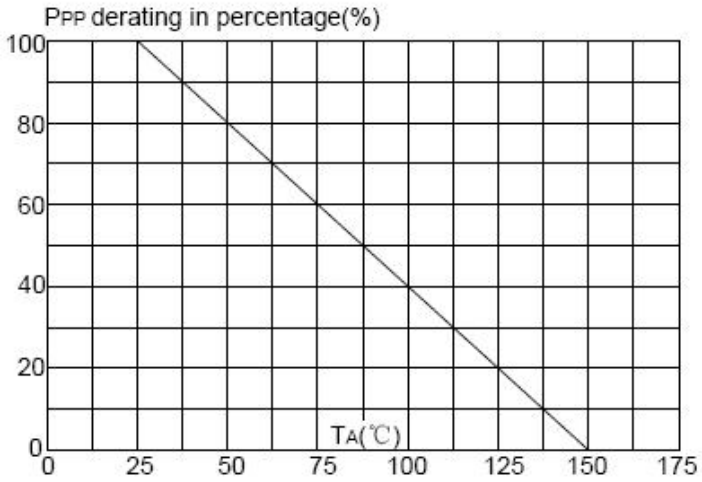
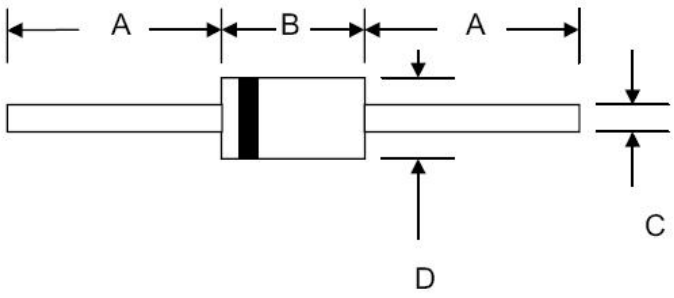


FIG.2: Pulse derating curve



Mechanical Dimensions DO-201AD



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	7.20	9.60	0.283	0.378
C	0.96	1.20	0.038	0.047
D	4.80	5.40	0.189	0.213

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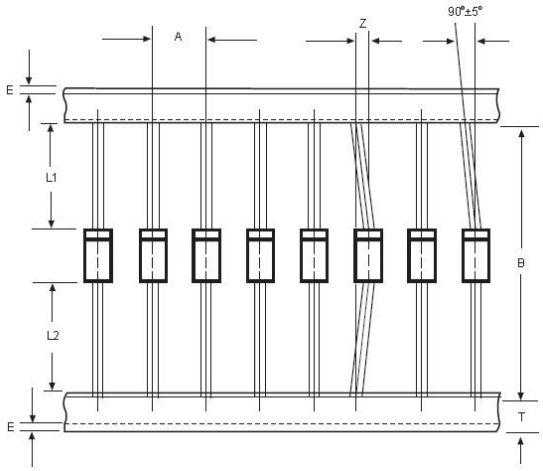
Ordering Information

Device	Package	Shipping
1.5KE530CA	DO-201AD (Pb-Free)	1000pcs / tape
1.5KE530CATA	DO-201AD (Pb-Free)	1000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

Carrier Tape Specification DO-201AD



SYMBOL	Millimeters	
	Min.	Max.
A	9.50	10.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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