

1.5KE10AS ~ 1.5KE250CAS Series

Transient Voltage Suppressor
Recongnized File # E210467

Voltage 10~250 V **Power** 1500 W

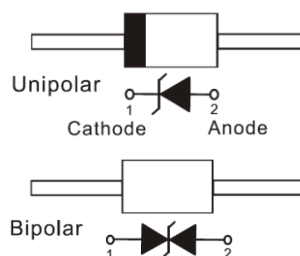
Features

- Fast response time
- Low incremental surge resistance
- High temperature soldering : 260°C /10 seconds at terminals
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: DO-201AE Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.04 ounces, 1.12 grams

DO-201AE



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation(tp = 10 / 1000 us)	P _{PP} ^{(1) (2)}	1500	W
Peak Pulse Current on tp = 10 / 1000 us waveform ^(Fig.2)	I _{PPM} ⁽¹⁾	See table 1	A
Power Dissipation on Infinite Heat Sink at T _L = 75 °C	P _D	6.5	W
ESD IEC61000-4-2(Air)	V _{ESD}	±30	kV
ESD IEC61000-4-2(Contact)		±30	
Typical Thermal Resistance Junction to Ambient	R _{θJA} ⁽³⁾	55	°C/W
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C



1.5KE10AS ~ 1.5KE250CAS Series

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Part Number		V _{RWM}	V _{BR}			I _R		V _{C@I_{PP}}		Marking Code	
			Min.	Max.	I _T	@V _{RWM}	uA				
UNI	BI	V	V	V	mA	UNI	BI	V	A	UNI	BI
1500W Transient Voltage Suppressor											
1.5KE10AS	1.5KE10CAS	8.55	9.5	10.5	1	10	20	14.5	103	1.5KE10AS	1.5KE10CAS
1.5KE11AS	1.5KE11CAS	9.4	10.5	11.6	1	5	10	15.6	96	1.5KE11AS	1.5KE11CAS
1.5KE12AS	1.5KE12CAS	10.2	11.4	12.6	1	5	5	16.7	90	1.5KE12AS	1.5KE12CAS
1.5KE13AS	1.5KE13CAS	11.1	12.4	13.7	1	1	1	18.2	82	1.5KE13AS	1.5KE13CAS
1.5KE15AS	1.5KE15CAS	12.8	14.3	15.8	1	1	1	21.2	71	1.5KE15AS	1.5KE15CAS
1.5KE16AS	1.5KE16CAS	13.6	15.2	16.8	1	1	1	22.5	67	1.5KE16AS	1.5KE16CAS
1.5KE18AS	1.5KE18CAS	15.3	17.1	18.9	1	1	1	25.2	59.5	1.5KE18AS	1.5KE18CAS
1.5KE20AS	1.5KE20CAS	17.1	19	21	1	1	1	27.7	54	1.5KE20AS	1.5KE20CAS
1.5KE22AS	1.5KE22CAS	18.8	20.9	23.1	1	1	1	30.6	49	1.5KE22AS	1.5KE22CAS
1.5KE24AS	1.5KE24CAS	20.5	22.8	25.2	1	1	1	33.2	45	1.5KE24AS	1.5KE24CAS
1.5KE27AS	1.5KE27CAS	23.1	25.7	28.4	1	1	1	37.5	40	1.5KE27AS	1.5KE27CAS
1.5KE30AS	1.5KE30CAS	25.6	28.5	31.5	1	1	1	41.4	36	1.5KE30AS	1.5KE30CAS
1.5KE33AS	1.5KE33CAS	28.2	31.4	34.7	1	1	1	45.7	33	1.5KE33AS	1.5KE33CAS
1.5KE36AS	1.5KE36CAS	30.8	34.2	37.8	1	1	1	49.9	30	1.5KE36AS	1.5KE36CAS
1.5KE39AS	1.5KE39CAS	33.3	37.1	41	1	1	1	53.9	28	1.5KE39AS	1.5KE39CAS
1.5KE43AS	1.5KE43CAS	36.8	40.9	45.2	1	1	1	59.3	25.3	1.5KE43AS	1.5KE43CAS
1.5KE47AS	1.5KE47CAS	40.2	44.7	49.4	1	1	1	64.8	23.2	1.5KE47AS	1.5KE47CAS
1.5KE51AS	1.5KE51CAS	43.6	48.5	53.6	1	1	1	70.1	21.4	1.5KE51AS	1.5KE51CAS
1.5KE56AS	1.5KE56CAS	47.8	53.2	58.8	1	1	1	77	19.5	1.5KE56AS	1.5KE56CAS
1.5KE62AS	1.5KE62CAS	53	58.9	65.1	1	1	1	85	17.7	1.5KE62AS	1.5KE62CAS
1.5KE68AS	1.5KE68CAS	58.1	64.6	71.4	1	1	1	92	16.3	1.5KE68AS	1.5KE68CAS
1.5KE75AS	1.5KE75CAS	64.1	71.3	78.8	1	1	1	103	14.6	1.5KE75AS	1.5KE75CAS
1.5KE82AS	1.5KE82CAS	70.1	77.9	86.1	1	1	1	113	13.3	1.5KE82AS	1.5KE82CAS
1.5KE91AS	1.5KE91CAS	77.8	86.5	95.5	1	1	1	125	12	1.5KE91AS	1.5KE91CAS
1.5KE100AS	1.5KE100CAS	85.5	95	105	1	1	1	137	11	1.5KE100AS	1.5KE100CAS
1.5KE110AS	1.5KE110CAS	94	105	116	1	1	1	152	9.9	1.5KE110AS	1.5KE110CAS
1.5KE120AS	1.5KE120CAS	102	114	126	1	1	1	165	9.1	1.5KE120AS	1.5KE120CAS
1.5KE130AS	1.5KE130CAS	111	124	137	1	1	1	179	8.4	1.5KE130AS	1.5KE130CAS
1.5KE150AS	1.5KE150CAS	128	143	158	1	1	1	207	7.2	1.5KE150AS	1.5KE150CAS



1.5KE10AS ~ 1.5KE250CAS Series

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Part Number		VRW M	VBR			IR @VRWM		VC@IPP		Marking Code	
			Min.	Max.	IT	uA					
UNI	BI	V	V	V	mA	UNI	BI	V	A	UNI	BI
1500W Transient Voltage Suppressor											
1.5KE160AS	1.5KE160CAS	136	152	168	1	1	1	219	6.8	1.5KE160AS	1.5KE160CAS
1.5KE170AS	1.5KE170CAS	145	162	179	1	1	1	234	6.4	1.5KE170AS	1.5KE170CAS
1.5KE180AS	1.5KE180CAS	154	171	189	1	1	1	246	6.1	1.5KE180AS	1.5KE180CAS
1.5KE200AS	1.5KE200CAS	171	190	210	1	1	1	274	5.5	1.5KE200AS	1.5KE200CAS
1.5KE220AS	1.5KE220CAS	185	209	231	1	1	1	328	4.6	1.5KE220AS	1.5KE220CAS
1.5KE250AS	1.5KE250CAS	214	237	263	1	1	1	344	4.5	1.5KE250AS	1.5KE250CAS

Notes :

1. Non-repetitive current pulse, per Fig.3 and derated above $T_A=25^\circ\text{C}$ per Fig.2
2. Mounted on 100cm² copper pads to each terminal
3. Mounted on a FR4 PCB, single-sided copper, standard footprint

1.5KE10AS ~ 1.5KE250CAS Series

TYPICAL CHARACTERISTIC CURVES

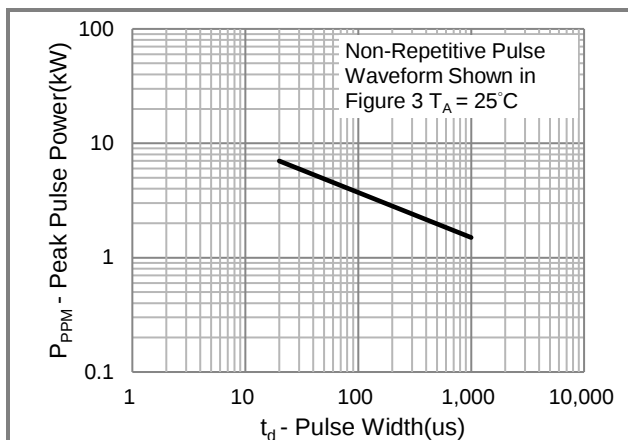


Fig.1 Pulse Power Rating Curve

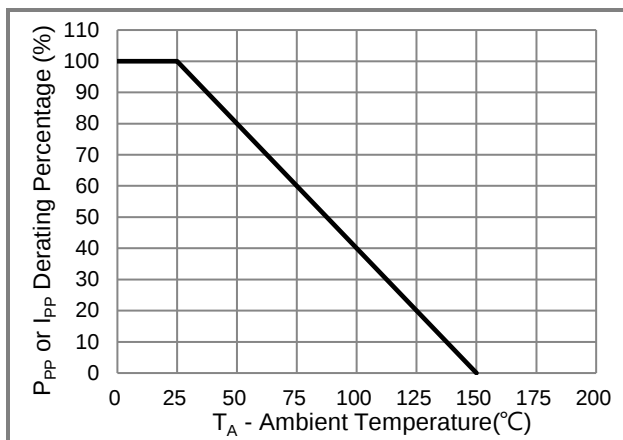


Fig.2 Derating Curve

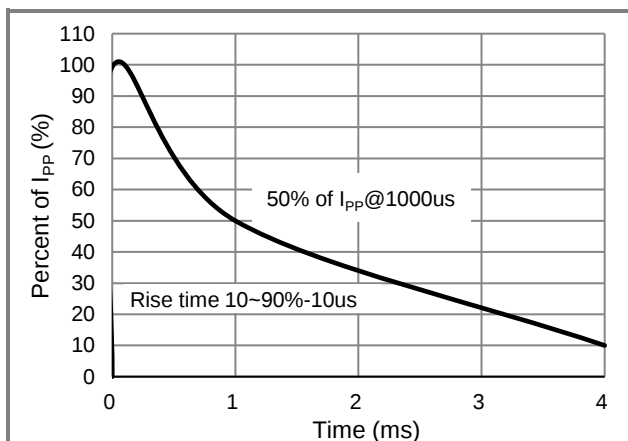


Fig.3 10/1000us Pulse Waveform

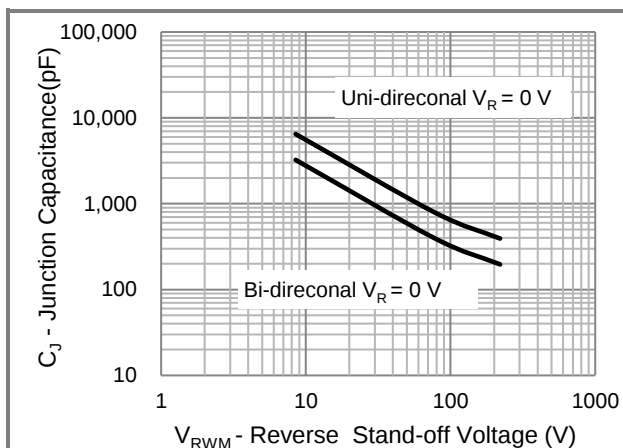


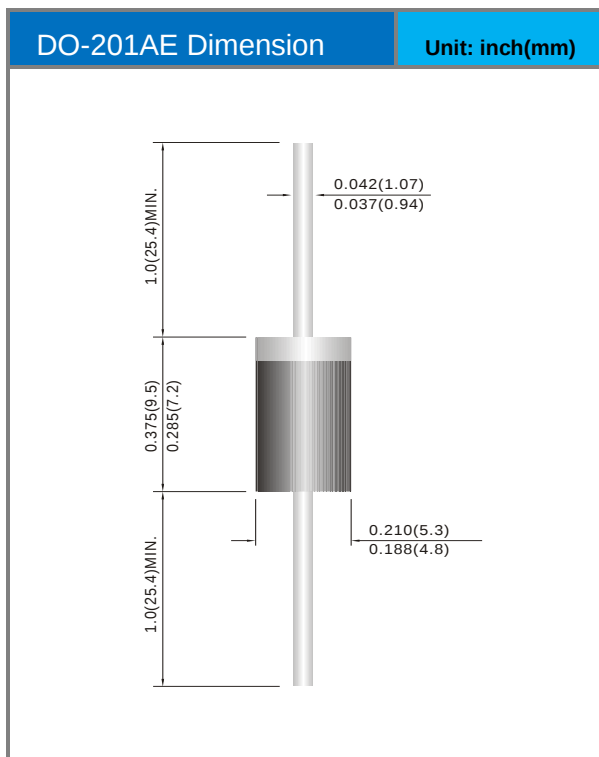
Fig.4 Typical Capacitance

1.5KE10AS ~ 1.5KE250CAS Series

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
1.5KExxxxAS_AY_00001	DO-201AE	1250pcs / Ammo	See Table	Halogen free RoHS compliant

Packaging Information





1.5KE10AS ~ 1.5KE250CAS Series

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[1.5KE51AS_AY_00001](#)