



P4KE10AS ~ P4KE250CAS Series

Surface Mount Transient Voltage Suppressor

Voltage 10~250 V **Power** 400 W

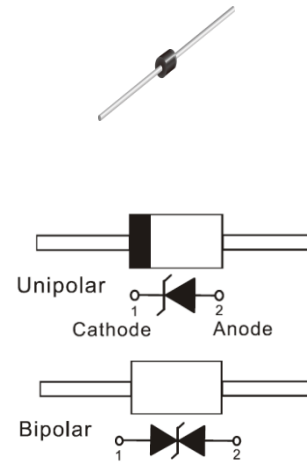
Features

- For surface mounted applications in order to optimize board space.
- Low inductance
- 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-41 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0119 ounces, 0.336 grams

DO-41



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)}	400	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	1.5	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⁾	80	°C/W
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C



P4KE10AS ~ P4KE250CAS Series

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Part Number		V _{RWM}	V _{BR}			I _R		V _{C@IPP}		Marking Code	
			Min.	Max.	I _T	@ V _{RWM}	uA				
UNI	BI	V	V	V	mA	UNI	BI	V	A	UNI	BI
400W Transient Voltage Suppressor											
P4KE10AS	P4KE10CAS	8.55	9.5	10.5	1	10	20	14.5	29	P4KE10AS	P4KE10CAS
P4KE11AS	P4KE11CAS	9.4	10.5	11.6	1	5	10	15.6	27	P4KE11AS	P4KE11CAS
P4KE12AS	P4KE12CAS	10.2	11.4	12.6	1	1	1	16.7	25	P4KE12AS	P4KE12CAS
P4KE13AS	P4KE13CAS	11.1	12.4	13.7	1	1	1	18.2	23	P4KE13AS	P4KE13CAS
P4KE15AS	P4KE15CAS	12.8	14.3	15.8	1	1	1	21.2	20	P4KE15AS	P4KE15CAS
P4KE16AS	P4KE16CAS	13.6	15.2	16.8	1	1	1	22.5	19	P4KE16AS	P4KE16CAS
P4KE18AS	P4KE18CAS	15.3	17.1	18.9	1	1	1	25.2	17	P4KE18AS	P4KE18CAS
P4KE20AS	P4KE20CAS	17.1	19	21	1	1	1	27.7	15	P4KE20AS	P4KE20CAS
P4KE22AS	P4KE22CAS	18.8	20.9	23.1	1	1	1	30.6	14	P4KE22AS	P4KE22CAS
P4KE24AS	P4KE24CAS	20.5	22.8	25.2	1	1	1	33.2	13	P4KE24AS	P4KE24CAS
P4KE27AS	P4KE27CAS	23.1	25.7	28.4	1	1	1	37.5	11.2	P4KE27AS	P4KE27CAS
P4KE30AS	P4KE30CAS	25.6	28.5	31.5	1	1	1	41.4	10	P4KE30AS	P4KE30CAS
P4KE33AS	P4KE33CAS	28.2	31.4	34.7	1	1	1	45.7	9	P4KE33AS	P4KE33CAS
P4KE36AS	P4KE36CAS	30.8	34.2	37.8	1	1	1	49.9	8.4	P4KE36AS	P4KE36CAS
P4KE39AS	P4KE39CAS	33.3	37.1	41	1	1	1	53.9	7.8	P4KE39AS	P4KE39CAS
P4KE43AS	P4KE43CAS	36.8	40.9	45.2	1	1	1	59.3	7.1	P4KE43AS	P4KE43CAS
P4KE47AS	P4KE47CAS	40.2	44.7	49.4	1	1	1	64.8	5	P4KE47AS	P4KE47CAS
P4KE51AS	P4KE51CAS	43.6	48.5	53.6	1	1	1	70.1	6	P4KE51AS	P4KE51CAS
P4KE56AS	P4KE56CAS	47.8	53.2	58.8	1	1	1	77	5.5	P4KE56AS	P4KE56CAS
P4KE62AS	P4KE62CAS	53	58.9	65.1	1	1	1	85	5	P4KE62AS	P4KE62CAS
P4KE68AS	P4KE68CAS	58.1	64.6	71.4	1	1	1	92	4.6	P4KE68AS	P4KE68CAS
P4KE75AS	P4KE75CAS	64.1	71.3	78.8	1	1	1	103	4.1	P4KE75AS	P4KE75CAS
P4KE82AS	P4KE82CAS	70.1	77.9	86.1	1	1	1	113	3.7	P4KE82AS	P4KE82CAS
P4KE91AS	P4KE91CAS	77.8	86.5	95.5	1	1	1	125	3.4	P4KE91AS	P4KE91CAS
P4KE100AS	P4KE100CAS	85.5	95	105	1	1	1	137	3.1	P4KE100AS	P4KE100CAS
P4KE110AS	P4KE110CAS	94	105	116	1	1	1	152	2.8	P4KE110AS	P4KE110CAS
P4KE120AS	P4KE120CAS	102	114	126	1	1	1	165	2.5	P4KE120AS	P4KE120CAS
P4KE130AS	P4KE130CAS	111	124	137	1	1	1	179	2.3	P4KE130AS	P4KE130CAS
P4KE150AS	P4KE150CAS	128	143	158	1	1	1	207	2	P4KE150AS	P4KE150CAS
P4KE160AS	P4KE160CAS	136	152	168	1	1	1	219	1.9	P4KE160AS	P4KE160CAS



P4KE10AS ~ P4KE250CAS Series

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

Part Number		VRWM	VBR			IR @VRWM		VC@IPP		Marking Code	
			Min.	Max.	IT	uA					
UNI	BI	V	V	V	mA	UNI	BI	V	A	UNI	BI
400W Transient Voltage Suppressor											
P4KE170AS	P4KE170CAS	145	162	179	1	1	1	234	1.8	P4KE170AS	P4KE170CAS
P4KE180AS	P4KE180CAS	154	171	189	1	1	1	246	1.7	P4KE180AS	P4KE180CAS
P4KE200AS	P4KE200CAS	171	190	210	1	1	1	274	1.5	P4KE200AS	P4KE200CAS
P4KE220AS	P4KE220CAS	185	209	231	1	1	1	328	1.2	P4KE220AS	P4KE220CAS
P4KE250AS	P4KE250CAS	214	237	263	1	1	1	344	1.2	P4KE250AS	P4KE250CAS

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



P4KE10AS ~ P4KE250CAS Series

TYPICAL CHARACTERISTIC CURVES

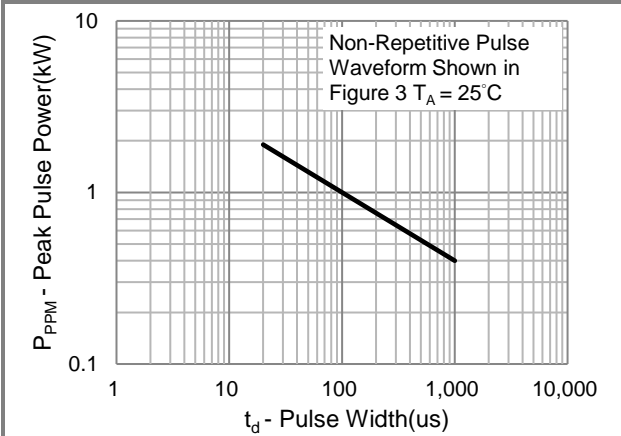


Fig.1 Pulse Power Rating Curve

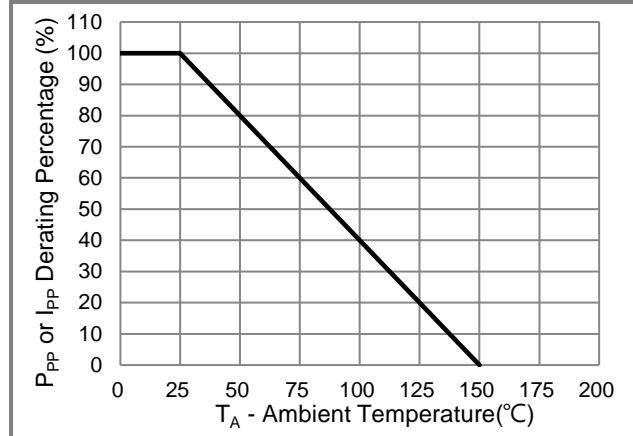


Fig.2 Derating Curve

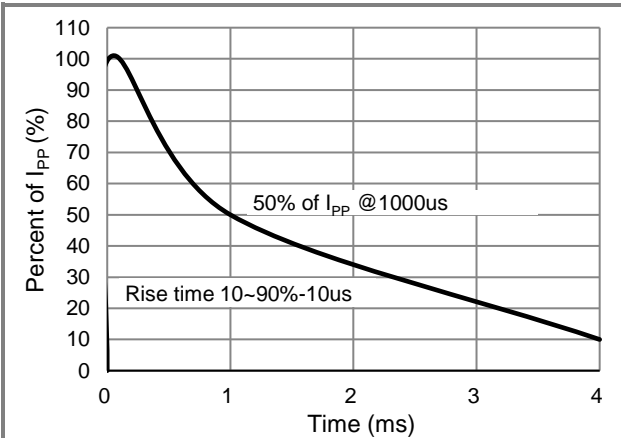


Fig.3 10/1000us Pulse Waveform

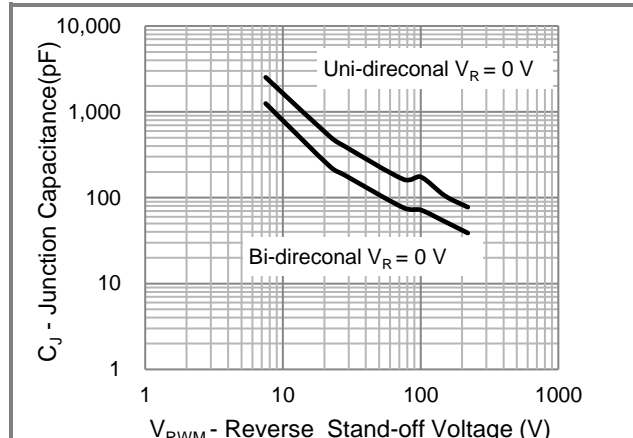


Fig.4 Typical Capacitance

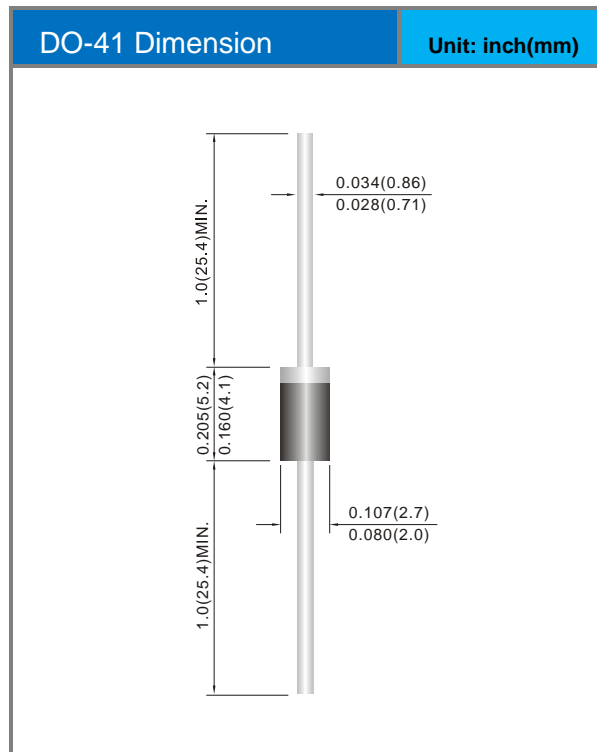


P4KE10AS ~ P4KE250CAS Series

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
P4KExxxxAS_AY_00001	DO-41	5K pcs / Ammo	See Table	Halogen free RoHS compliant

Packaging Information





P4KE10AS ~ P4KE250CAS 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.