



P6KE10AS ~ P6KE250CAS Series

Transient Voltage Suppressor
Recongnized File # E210467

Voltage 10~250 V **Power** 600 W

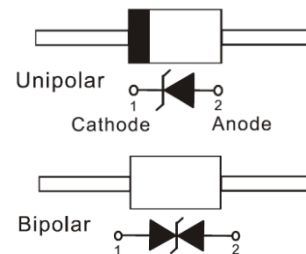
Features

- 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-15 Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.014 ounces, 0.4 grams

DO-15



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)}	600	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	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⁾	65	°C/W
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C



P6KE10AS ~ P6KE250CAS 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	$@ V_{RWM}$					
UNI	BI	V	V	V	mA	UNI	BI	V	A	UNI	BI
600W Transient Voltage Suppressor											
P6KE10AS	P6KE10CAS	8.55	9.5	10.5	1	10	20	14.5	41	P6KE10AS	P6KE10CAS
P6KE11AS	P6KE11CAS	9.4	10.5	11.6	1	5	10	15.6	38	P6KE11AS	P6KE11CAS
P6KE12AS	P6KE12CAS	10.2	11.4	12.6	1	5	5	16.7	36	P6KE12AS	P6KE12CAS
P6KE13AS	P6KE13CAS	11.1	12.4	13.7	1	1	1	18.2	33	P6KE13AS	P6KE13CAS
P6KE15AS	P6KE15CAS	12.8	14.3	15.8	1	1	1	21.2	28	P6KE15AS	P6KE15CAS
P6KE16AS	P6KE16CAS	13.6	15.2	16.8	1	1	1	22.5	27	P6KE16AS	P6KE16CAS
P6KE18AS	P6KE18CAS	15.3	17.1	18.9	1	1	1	25.2	24	P6KE18AS	P6KE18CAS
P6KE20AS	P6KE20CAS	17.1	19	21	1	1	1	27.7	22	P6KE20AS	P6KE20CAS
P6KE22AS	P6KE22CAS	18.8	20.9	23.1	1	1	1	30.6	20	P6KE22AS	P6KE22CAS
P6KE24AS	P6KE24CAS	20.5	22.8	25.2	1	1	1	33.2	18	P6KE24AS	P6KE24CAS
P6KE27AS	P6KE27CAS	23.1	25.7	28.4	1	1	1	37.5	16	P6KE27AS	P6KE27CAS
P6KE30AS	P6KE30CAS	25.6	28.5	31.5	1	1	1	41.4	14.4	P6KE30AS	P6KE30CAS
P6KE33AS	P6KE33CAS	28.2	31.4	34.7	1	1	1	45.7	13.2	P6KE33AS	P6KE33CAS
P6KE36AS	P6KE36CAS	30.8	34.2	37.8	1	1	1	49.9	12	P6KE36AS	P6KE36CAS
P6KE39AS	P6KE39CAS	33.3	37.1	41	1	1	1	53.9	11.2	P6KE39AS	P6KE39CAS
P6KE43AS	P6KE43CAS	36.8	40.9	45.2	1	1	1	59.3	10.1	P6KE43AS	P6KE43CAS
P6KE47AS	P6KE47CAS	40.2	44.7	49.4	1	1	1	64.8	9.3	P6KE47AS	P6KE47CAS
P6KE51AS	P6KE51CAS	43.6	48.5	53.6	1	1	1	70.1	8.6	P6KE51AS	P6KE51CAS
P6KE56AS	P6KE56CAS	47.8	53.2	58.8	1	1	1	77	7.8	P6KE56AS	P6KE56CAS
P6KE62AS	P6KE62CAS	53	58.9	65.1	1	1	1	85	7.1	P6KE62AS	P6KE62CAS
P6KE68AS	P6KE68CAS	58.1	64.6	71.4	1	1	1	92	6.5	P6KE68AS	P6KE68CAS
P6KE75AS	P6KE75CAS	64.1	71.3	78.8	1	1	1	103	5.8	P6KE75AS	P6KE75CAS
P6KE82AS	P6KE82CAS	70.1	77.9	86.1	1	1	1	113	5.3	P6KE82AS	P6KE82CAS
P6KE91AS	P6KE91CAS	77.8	86.5	95.5	1	1	1	125	4.8	P6KE91AS	P6KE91CAS
P6KE100AS	P6KE100CAS	85.5	95	105	1	1	1	137	4.4	P6KE100AS	P6KE100CAS
P6KE110AS	P6KE110CAS	94	105	116	1	1	1	152	4	P6KE110AS	P6KE110CAS
P6KE120AS	P6KE120CAS	102	114	126	1	1	1	165	3.6	P6KE120AS	P6KE120CAS
P6KE130AS	P6KE130CAS	111	124	137	1	1	1	179	3.3	P6KE130AS	P6KE130CAS
P6KE150AS	P6KE150CAS	128	143	158	1	1	1	207	2.9	P6KE150AS	P6KE150CAS
P6KE160AS	P6KE160CAS	136	152	168	1	1	1	219	2.7	P6KE160AS	P6KE160CAS



P6KE10AS ~ P6KE250CAS 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}					
UNI	BI	V	V	V	mA	UNI	BI	V	A	UNI	BI
600W Transient Voltage Suppressor											
P6KE170AS	P6KE170CAS	145	162	179	1	1	1	234	2.6	P6KE170AS	P6KE170CAS
P6KE180AS	P6KE180CAS	154	171	189	1	1	1	246	2.4	P6KE180AS	P6KE180CAS
P6KE200AS	P6KE200CAS	171	190	210	1	1	1	274	2.2	P6KE200AS	P6KE200CAS
P6KE220AS	P6KE220CAS	185	209	231	1	1	1	328	1.9	P6KE220AS	P6KE220CAS
P6KE250AS	P6KE250CAS	214	237	263	1	1	1	344	1.8	P6KE250AS	P6KE250CAS

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



P6KE10AS ~ P6KE250CAS Series

TYPICAL CHARACTERISTIC CURVES

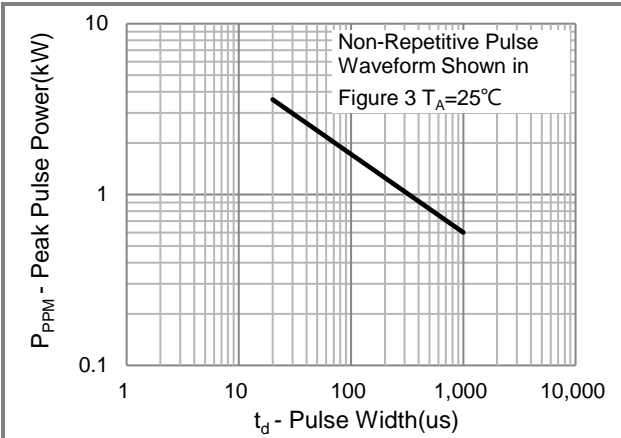


Fig.1 Pulse Power Rating Curve



Fig.2 Derating Curve

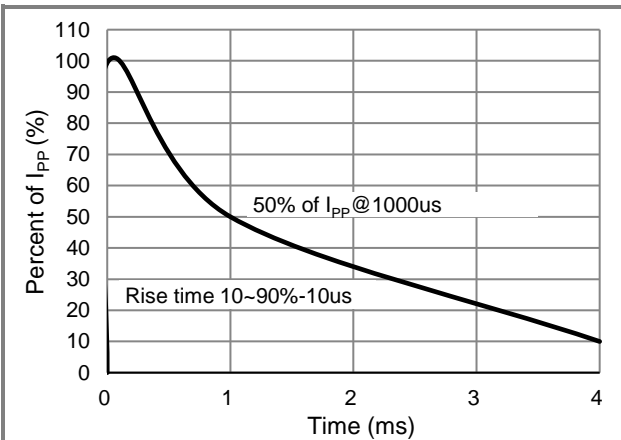


Fig.3 10/1000us Pulse Waveform

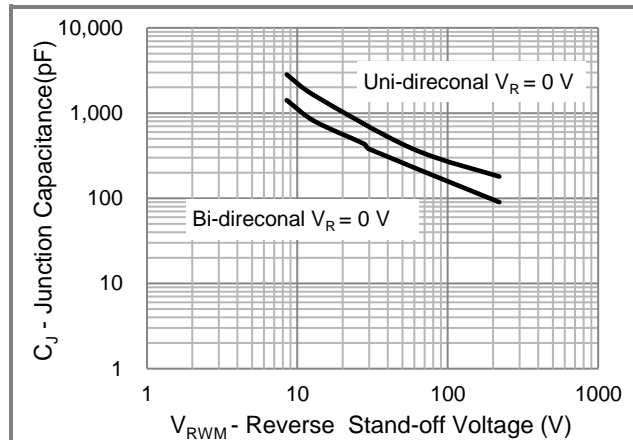


Fig.4 Typical Capacitance

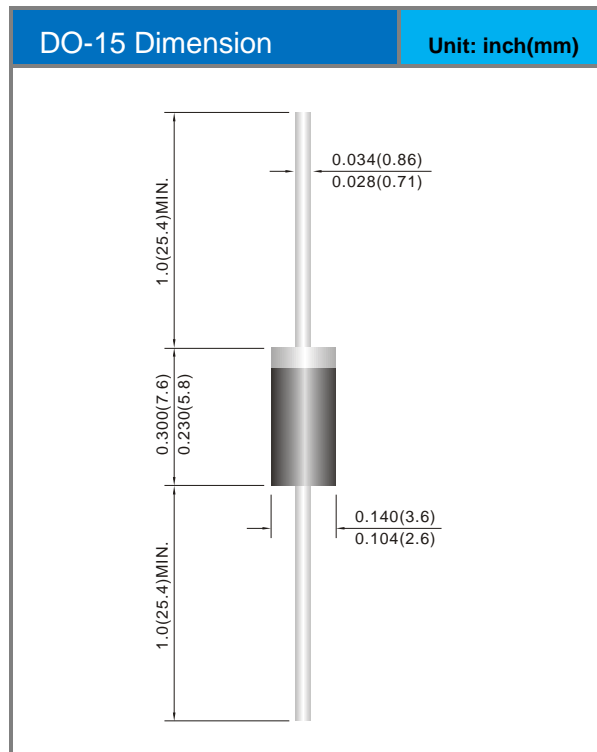


P6KE10AS ~ P6KE250CAS Series

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
P6KExxxxAS_AY_00001	DO-15	3K pcs / Ammo	See Table	Halogen free RoHS compliant

Packaging Information





P6KE10AS ~ P6KE250CAS 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:](#)

[P6KE100AS_AY_00001](#)