



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



P6KE-G Series


Breakdown Voltage: 6.8 to 600 Volts

Peak Pulse Power: 600 Watts

RoHS Device

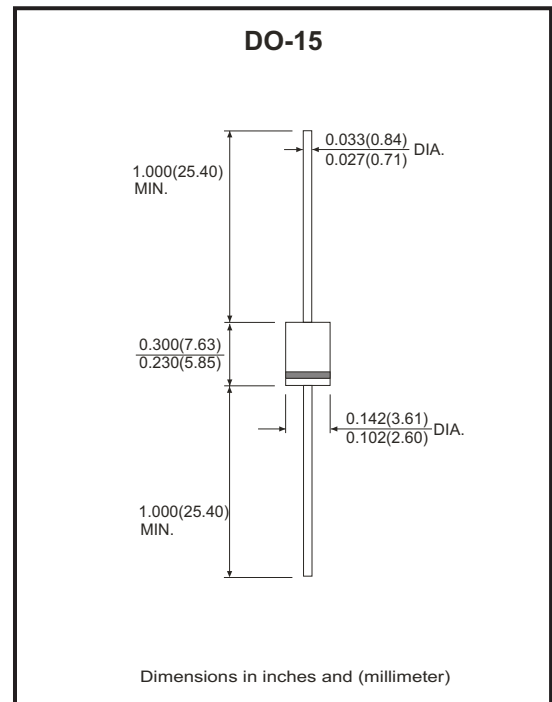


Features

- Glass passivated chip.
- 600W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate (duty cycle):0.01%
- Low leakage.
- Uni and Bidirectional unit.
- Excellent clamping capability.
- Very fast response time.
- UL recognized file # E349157  Range: P6KE6.8(C)A thru. P6KE47(C)A

Mechanical Data

- Case: Molded plastic DO-15.
- Epoxy: UL 94V-0 rate flame retardant.
- Lead: Solderable per MIL-STD-202, method 208 guaranteed.
- Polarity: Color band denotes cathode end except Bipolar.
- Mounting position: Any.
- Weight: 0.402 gram (approx.)



Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000 μ s waveform (Note 1)	PPP	600	W
Peak pulse current with a 10/1000 μ s waveform (Note 1)	I _{PP}	See Next Table	A
Power dissipation on infinite heatsink at T _L =75°C	P _D	5.0	W
Peak forward surge current, 8.3ms single half sine-wave unidirectional only (Note 2)	I _{FSM}	100	A
Maximum instantaneous forward voltage at 50 A for unidirectional only (Note 3)	V _F	3.5/5.0	V
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

NTOES:

- (1) Non-repetitive current pulse per fig.5 and derated above TA=25°C per fig.1
- (2) Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum
- (3) V_F<3.5V for devices of V_{BR}<200V and V_F<5.0V for devices of V_{BR}>201V

Company reserves the right to improve product design , functions and reliability without notice.

REV:E

Rating and Characteristic Curves (P6KE-G Series)

Fig.1 - Pulse Derating Curve

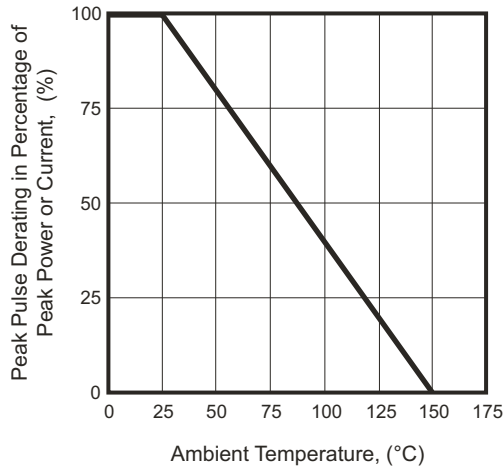


Fig.2 - Maximum Non-Repetitive Surge Current

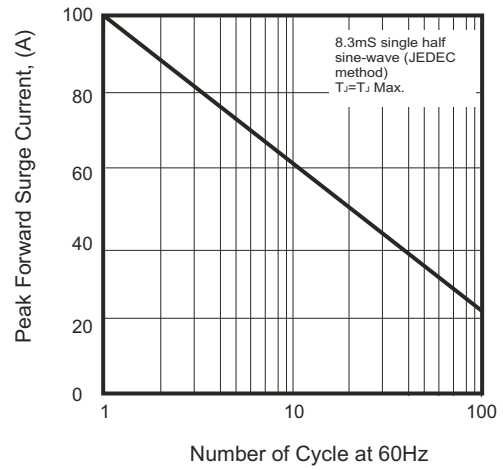


Fig.3 - Steady State Power Derating Curve

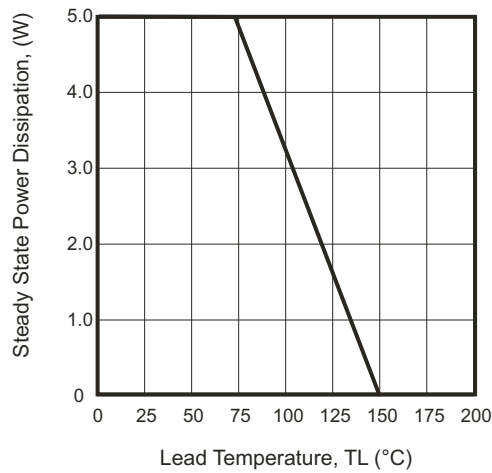


Fig.4 - Peak Pulse Power Rating Curve

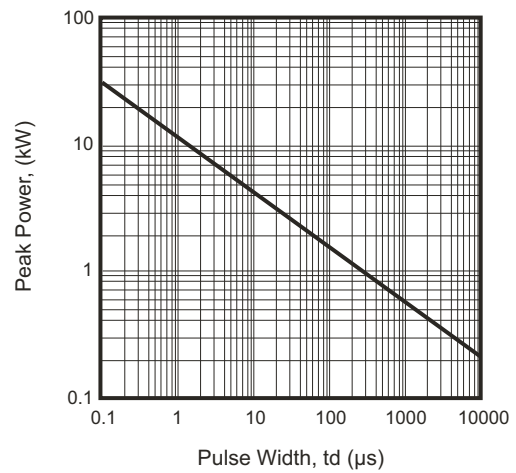


Fig.5 - Pulse Waveform

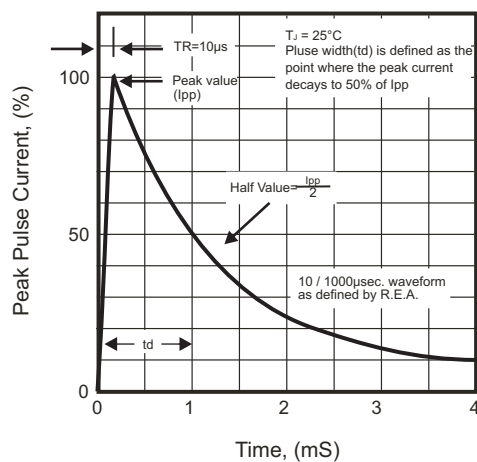
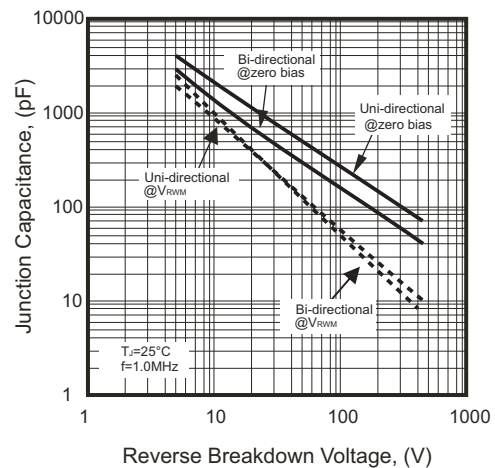


Fig.6 - Typical Junction Capacitance



Company reserves the right to improve product design, functions and reliability without notice.

600W Transient Voltage Suppressor

Electrical Characteristics (P6KE-G Series)

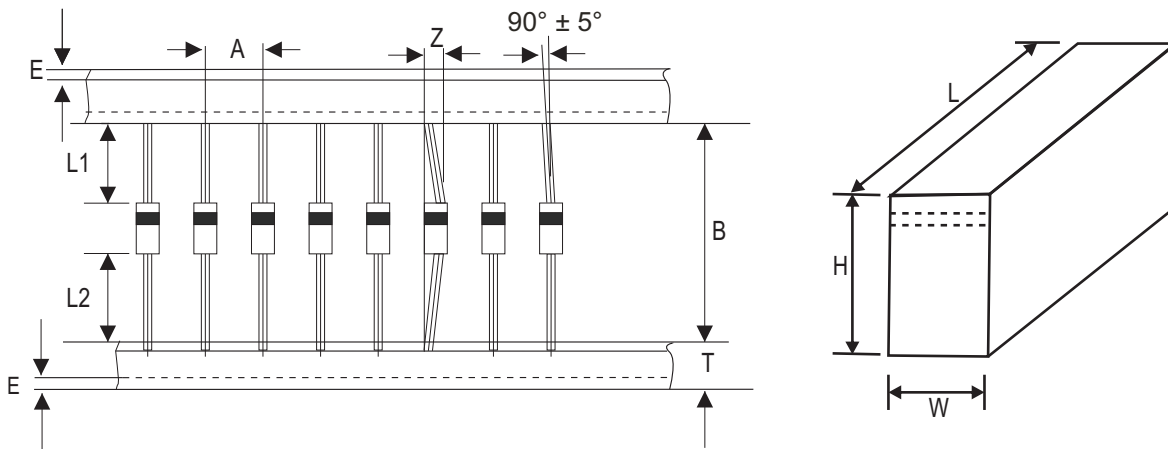
Part No.	Breakdown voltage VBR @ IT			Maximum Reverse Leakage @VRWM IR (uA)	Working Peak Reverse Voltage VRWM (V)	Maximum Reverse Surge Current IPP (A)	Maximum Clamping Voltage @IPP Vc (V)	Marking Code	
	Min. (V)	Max. (V)	IT (mA)					UNI	BI
P6KE6.8(C)A-G	6.46	7.14	10	1000	5.8	57.14	10.5	P6KE6.8A	P6KE6.8CA
P6KE7.5(C)A-G	7.13	7.88	10	500	6.4	53.10	11.3	P6KE7.5A	P6KE7.5CA
P6KE8.2(C)A-G	7.79	8.61	10	200	7.0	49.59	12.1	P6KE8.2A	P6KE8.2CA
P6KE9.1(C)A-G	8.65	9.56	1	50	7.8	44.78	13.4	P6KE9.1A	P6KE9.1CA
P6KE10(C)A-G	9.50	10.50	1	10	8.6	41.38	14.5	P6KE10A	P6KE10CA
P6KE11(C)A-G	10.45	11.55	1	5.0	9.4	38.46	15.6	P6KE11A	P6KE11CA
P6KE12(C)A-G	11.40	12.60	1	5.0	10.2	35.93	16.7	P6KE12A	P6KE12CA
P6KE13(C)A-G	12.35	13.65	1	1	11.1	32.97	18.2	P6KE13A	P6KE13CA
P6KE15(C)A-G	14.25	15.75	1	1	12.8	28.30	21.2	P6KE15A	P6KE15CA
P6KE16(C)A-G	15.20	16.80	1	1	13.6	26.67	22.5	P6KE16A	P6KE16CA
P6KE18(C)A-G	17.10	18.90	1	1	15.3	23.81	25.2	P6KE18A	P6KE18CA
P6KE20(C)A-G	19.00	21.00	1	1	17.1	21.66	27.7	P6KE20A	P6KE20CA
P6KE22(C)A-G	20.90	23.10	1	1	18.8	19.61	30.6	P6KE22A	P6KE22CA
P6KE24(C)A-G	22.80	25.20	1	1	20.5	18.07	33.2	P6KE24A	P6KE24CA
P6KE27(C)A-G	25.65	28.35	1	1	23.1	16.00	37.5	P6KE27A	P6KE27CA
P6KE30(C)A-G	28.50	31.50	1	1	25.6	14.49	41.4	P6KE30A	P6KE30CA
P6KE33(C)A-G	31.35	34.65	1	1	28.2	13.13	45.7	P6KE33A	P6KE33CA
P6KE36(C)A-G	34.20	37.80	1	1	30.8	12.02	49.9	P6KE36A	P6KE36CA
P6KE39(C)A-G	37.05	40.95	1	1	33.3	11.13	53.9	P6KE39A	P6KE39CA
P6KE43(C)A-G	40.85	45.15	1	1	36.8	10.12	59.3	P6KE43A	P6KE43CA
P6KE47(C)A-G	44.65	49.35	1	1	40.2	9.26	64.8	P6KE47A	P6KE47CA
P6KE51(C)A-G	48.45	53.55	1	1	43.6	8.56	70.1	P6KE51A	P6KE51CA
P6KE56(C)A-G	53.20	58.80	1	1	47.8	7.79	77.0	P6KE56A	P6KE56CA
P6KE62(C)A-G	58.90	65.10	1	1	53.0	7.06	85.0	P6KE62A	P6KE62CA
P6KE68(C)A-G	64.60	71.40	1	1	58.1	6.52	92.0	P6KE68A	P6KE68CA
P6KE75(C)A-G	71.25	78.75	1	1	64.1	5.83	103.0	P6KE75A	P6KE75CA
P6KE82(C)A-G	77.90	86.10	1	1	70.1	5.31	113.0	P6KE82A	P6KE82CA
P6KE91(C)A-G	86.45	95.55	1	1	77.8	4.80	125.0	P6KE91A	P6KE91CA
P6KE100(C)A-G	95.00	105.00	1	1	85.5	4.38	137.0	P6KE100A	P6KE100CA
P6KE110(C)A-G	104.50	115.50	1	1	94.0	3.95	152.0	P6KE110A	P6KE110CA
P6KE120(C)A-G	114.00	126.00	1	1	102.0	3.64	165.0	P6KE120A	P6KE120CA
P6KE130(C)A-G	123.50	136.50	1	1	111.0	3.35	179.0	P6KE130A	P6KE130CA
P6KE150(C)A-G	142.50	157.50	1	1	128.0	2.90	207.0	P6KE150A	P6KE150CA
P6KE160(C)A-G	152.00	168.00	1	1	136.0	2.74	219.0	P6KE160A	P6KE160CA
P6KE170(C)A-G	161.50	178.50	1	1	145.0	2.56	234.0	P6KE170A	P6KE170CA
P6KE180(C)A-G	171.00	189.00	1	1	154.0	2.44	246.0	P6KE180A	P6KE180CA
P6KE200(C)A-G	190.00	210.00	1	1	171.0	2.19	274.0	P6KE200A	P6KE200CA
P6KE220(C)A-G	209.00	231.00	1	1	185.0	1.83	328.0	P6KE220A	P6KE220CA
P6KE250(C)A-G	237.50	262.50	1	1	214.0	1.74	344.0	P6KE250A	P6KE250CA
P6KE300(C)A-G	285.00	315.00	1	1	256.0	1.45	414.0	P6KE300A	P6KE300CA
P6KE350(C)A-G	332.50	367.50	1	1	299.3	1.24	482.0	P6KE350A	P6KE350CA
P6KE380(C)A-G	361.00	399.00	1	1	324.9	1.14	524.4	P6KE380A	P6KE380CA
P6KE400(C)A-G	380.00	420.00	1	1	342.0	1.09	548.0	P6KE400A	P6KE400CA
P6KE440(C)A-G	418.00	462.00	1	1	376.2	0.99	607.2	P6KE440A	P6KE440CA
P6KE500(C)A-G	475.00	525.00	1	1	427.5	0.87	690.0	P6KE500A	P6KE500CA
P6KE520(C)A-G	494.00	546.00	1	1	444.6	0.84	717.6	P6KE520A	P6KE520CA
P6KE550(C)A-G	522.50	577.50	1	1	470.3	0.79	759.0	P6KE550A	P6KE550CA
P6KE600(C)A-G	570.00	630.00	1	1	513.0	0.72	828.0	P6KE600A	P6KE600CA

- Note: 1) Suffix A denotes 5% tolerance devices.
 2) Add suffix "C" or "CA" after part number to specify Bi-directional devices.
 3) For Bi-Directional devices having VR of 10 volts and under, the IR limit is double.

Company reserves the right to improve product design , functions and reliability without notice.

REV:E

Taping Specification For Axial Lead Diodes



DO-15	SYMBOL	A	B	Z	T	E
	(mm)	5.00 ± 0.50	52.00 ± 0.50	1.20 (max)	6.00 ± 0.40	3.00 (max)
	(inch)	0.197 ± 0.020	2.047 ± 0.020	0.047 (max)	0.236 ± 0.016	0.118 (max)

DO-15	SYMBOL	L1	L2	L	W	H
	(mm)	1.00 (max)	1.00 (max)	260.00	75.00	145.00
	(inch)	0.039 (max)	0.039 (max)	10.236	2.953	5.709

Standard Packaging

Case Type	AMMO PACK	
	BOX (pcs)	CARTON (pcs)
DO-15	3,000	30,000