

GLASS PASSIVATED UNIDIRECTIONAL AND BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS		REVERSE VOLTAGE - 6.8 to 440Volts POWER DISSIPATION - 600 Watts																													
FEATURES ● low leakage ● Uni and bidirectional unit ● Excellent clamping capability ● Plastic material has UL recognition 94V-0 ● Fast response time MECHANICAL DATA ● Case : Molded Plastic ● Marking : Unidirectional -type number and cathode band Bidirectional-type number only ● Weight : 0.4 grams		DO-15 Dimensions in inches and(millimeters)																													
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20% <table><tr><th>CHARACTERISTICS</th><th>SYMBOL</th><th>VALUE</th><th>UNIT</th></tr><tr><td>Peak Power Dissipation at T_A=25°C TP=1ms (NOTE1)</td><td>P_{PK}</td><td>Minimum 600</td><td>WATTS</td></tr><tr><td>Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)</td><td>I_{FSM}</td><td>100</td><td>AMPS</td></tr><tr><td>Steady State Power Dissipation at T_L=75°C Llead Lengths 0.375"(9.5mm),See Fig. 4</td><td>P_{M(AV)}</td><td>5.0</td><td>WATTS</td></tr><tr><td>Maximum Instantaneous Forward Voltage at 50A for Unidirectional Devices Only (NOTE2)</td><td>V_F</td><td>See NOTE 3</td><td>VOLTS</td></tr><tr><td>Operating Temperature Range</td><td>T_J</td><td>-55 to + 150</td><td>°C</td></tr><tr><td>Storage Temperature Range</td><td>T_{STG}</td><td>-55 to + 175</td><td>°C</td></tr></table> NOTES:1. Non-repetitive current pulse ,per Fig. 5 and derated above TA=25°C per Fig. 1 . 2. 8.3ms single half-wave duty cycle=4 pulses per minutes maximum (uni-directional units only). 3. V_F=3.5V on P6KE6.8 thru P6KE200A devices and V_F=5.0V on P6KE220A thru P6KE400A devices.				CHARACTERISTICS	SYMBOL	VALUE	UNIT	Peak Power Dissipation at T _A =25°C TP=1ms (NOTE1)	P _{PK}	Minimum 600	WATTS	Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	100	AMPS	Steady State Power Dissipation at T _L =75°C Llead Lengths 0.375"(9.5mm),See Fig. 4	P _{M(AV)}	5.0	WATTS	Maximum Instantaneous Forward Voltage at 50A for Unidirectional Devices Only (NOTE2)	V _F	See NOTE 3	VOLTS	Operating Temperature Range	T _J	-55 to + 150	°C	Storage Temperature Range	T _{STG}	-55 to + 175	°C
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FIG.1-PULSE DERATING CURVE

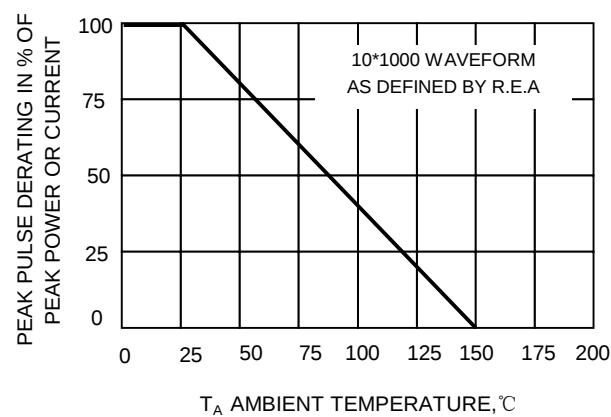


FIG.2-TYPICAL JUNCTION CAPACITANCE

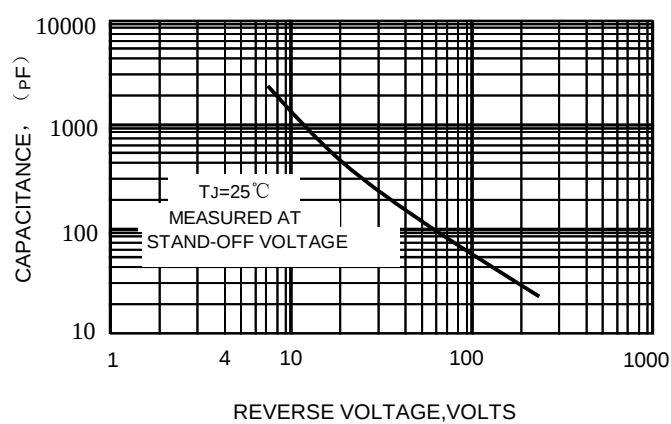


FIG.3-PULSE RATING CURVE

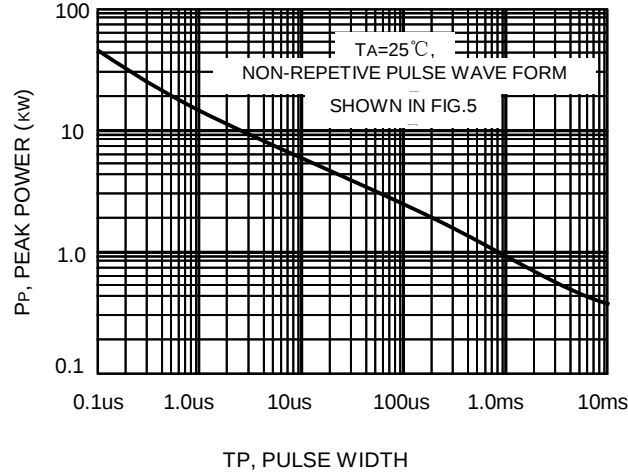


FIG.4-STEADY STATE POWER DERATING CURVE

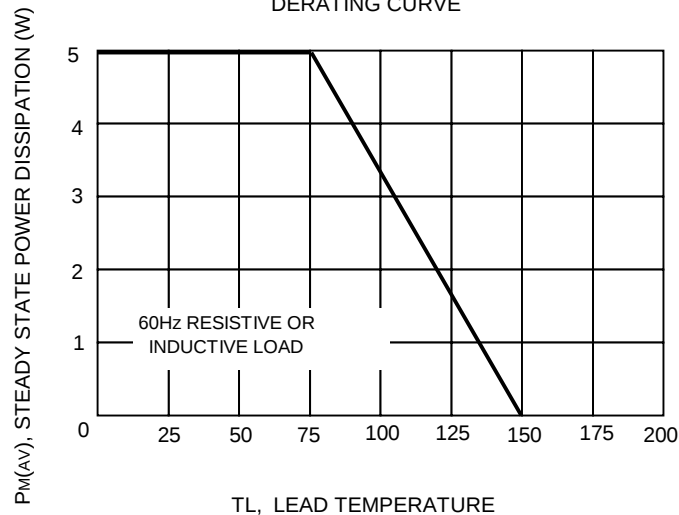
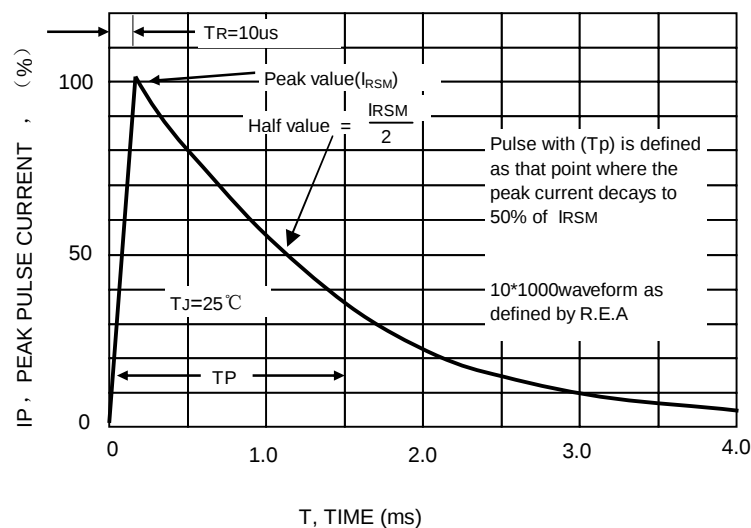


FIG.5 -PULSE WAVEFORM



Type Number	Type Number	Reverse Standoff Voltage	Breakdown Voltage BV Volts @ It			Max. Reverse Leakage @	Max. Clamping Voltage @IP	Max. Peak Pulse Current	Max. Voltage Temp. Variation Of BV
(UNI)	(BI)	VR(V)	Min(V)	Max(V)	It(mA)	IR(uA)	Vc(V)	Ipp(A)	%/°C
P6KE6.8	P6KE6.8C	5.50	6.12	7.48	10	1000	10.8	56.0	0.057
P6KE6.8A	P6KE6.8CA	5.80	6.45	7.14	10	1000	10.5	57.0	0.057
P6KE7.5	P6KE7.5C	6.05	6.75	8.25	10	500	11.7	51.0	0.061
P6KE7.5A	P6KE7.5CA	6.40	7.13	7.88	10	500	11.3	53.0	0.061
P6KE8.2	P6KE8.2C	6.63	7.38	9.02	10	200	12.5	48.0	0.065
P6KE8.2A	P6KE8.2CA	7.02	7.79	8.61	10	200	12.1	50.0	0.065
P6KE9.1	P6KE9.1C	7.37	8.19	10.00	1	50	13.8	44.0	0.068
P6KE9.1A	P6KE9.1CA	7.78	8.65	9.55	1	50	13.4	45.0	0.068
P6KE10	P6KE10C	8.10	9.00	11.00	1	10	15.0	40.0	0.073
P6KE10A	P6KE10CA	8.55	9.50	10.50	1	10	14.5	41.0	0.073
P6KE11	P6KE11C	8.92	9.90	12.10	1	5	16.2	37.0	0.075
P6KE11A	P6KE11CA	9.40	10.50	11.60	1	5	15.6	38.0	0.075
P6KE12	P6KE12C	9.72	10.80	13.20	1	5	17.3	35.0	0.078
P6KE12A	P6KE12CA	10.20	11.40	12.60	1	5	16.7	36.0	0.078
P6KE13	P6KE13C	10.50	11.70	14.30	1	5	19.0	32.0	0.081
P6KE13A	P6KE13CA	11.10	12.40	13.70	1	5	18.2	33.0	0.081
P6KE15	P6KE15C	12.10	13.50	16.50	1	5	22.0	27.0	0.084
P6KE15A	P6KE15CA	12.80	14.30	15.80	1	5	21.2	28.0	0.084
P6KE16	P6KE16C	12.90	14.40	17.60	1	5	23.5	26.0	0.086
P6KE16A	P6KE16CA	13.60	15.20	16.80	1	5	22.5	27.0	0.086
P6KE18	P6KE18C	14.50	16.20	19.80	1	5	26.5	23.0	0.088
P6KE18A	P6KE18CA	15.30	17.10	18.90	1	5	25.2	24.0	0.088
P6KE20	P6KE20C	16.20	18.00	22.00	1	5	29.1	21.0	0.090
P6KE20A	P6KE20CA	17.10	19.00	21.00	1	5	27.7	22.0	0.090
P6KE22	P6KE22C	17.80	19.80	24.20	1	5	31.9	19.0	0.092
P6KE22A	P6KE22CA	18.80	20.90	23.10	1	5	30.6	20.0	0.092
P6KE24	P6KE24C	19.40	21.60	26.40	1	5	34.7	17.0	0.094
P6KE24A	P6KE24CA	20.50	22.80	25.20	1	5	33.2	18.0	0.094
P6KE27	P6KE27C	21.80	24.30	29.70	1	5	39.1	15.0	0.096
P6KE27A	P6KE27CA	23.10	25.70	28.40	1	5	37.5	16.0	0.096
P6KE30	P6KE30C	24.30	27.00	33.00	1	5	43.5	14.0	0.097
P6KE30A	P6KE30CA	25.60	28.50	31.50	1	5	41.4	14.4	0.097
P6KE33	P6KE33C	26.80	29.70	36.30	1	5	47.7	12.6	0.098
P6KE33A	P6KE33CA	28.20	31.40	34.70	1	5	45.7	13.2	0.098
P6KE36	P6KE36C	29.10	32.40	39.60	1	5	52.0	11.6	0.099
P6KE36A	P6KE36CA	30.80	34.20	37.80	1	5	49.9	12.0	0.099
P6KE39	P6KE39C	31.60	35.10	42.90	1	5	56.4	10.5	0.100
P6KE39A	P6KE39CA	33.30	37.10	41.00	1	5	53.9	11.2	0.100
P6KE43	P6KE43C	34.80	38.70	47.30	1	5	61.9	9.6	0.101
P6KE43A	P6KE43CA	36.80	40.90	45.20	1	5	59.3	10.1	0.101
P6KE47	P6KE47C	38.10	42.30	51.70	1	5	67.8	8.9	0.101
P6KE47A	P6KE47CA	40.20	44.70	49.40	1	5	64.8	9.3	0.101
P6KE51	P6KE51C	41.30	45.90	56.10	1	5	73.5	8.2	0.102
P6KE51A	P6KE51CA	43.60	48.50	53.60	1	5	70.1	8.6	0.102
P6KE56	P6KE56C	45.40	50.40	61.60	1	5	80.5	7.4	0.103
P6KE56A	P6KE56CA	47.80	53.20	58.80	1	5	77.0	7.8	0.103

P6KE SERIES



Type Number	Type Number	Reverse Standoff Voltage	Breakdown Voltage BV Volts@It			Max. Reverse Leakage	Max. Clamping Voltage	Max. Peak Pulse	Max. Voltage Temp.
(UNI)	(BI)	VR(V)	Min(V)	Max(V)	It(mA)	IR(uA)	Vc(V)	Ipp(A)	%/°C
P4KE62	P4KE62C	50.2	55.8	68.2	1	5	89.0	6.80	0.104
P4KE62A	P4KE62CA	53.0	58.9	65.1	1	5	85.0	7.10	0.104
P4KE68	P4KE68C	55.1	61.2	74.8	1	5	98.0	6.10	0.104
P4KE68A	P4KE68CA	58.1	64.6	71.4	1	5	92.0	6.50	0.104
P4KE75	P4KE75C	60.7	67.5	82.5	1	5	108.0	5.50	0.105
P4KE75A	P4KE75CA	64.7	71.3	78.8	1	5	103.0	5.80	0.105
P4KE82	P4KE82C	66.4	73.8	90.2	1	5	118.0	5.10	0.105
P4KE82A	P4KE82CA	70.1	77.9	86.1	1	5	113.0	5.30	0.105
P4KE91	P4KE91C	73.7	81.9	100.0	1	5	131.0	4.50	0.106
P4KE91A	P4KE91CA	77.8	86.5	95.5	1	5	125.0	4.80	0.106
P4KE100	P4KE100C	81.0	90.0	110.0	1	5	144.0	4.20	0.106
P4KE100A	P4KE100CA	85.5	95.0	105.0	1	5	137.0	4.40	0.106
P4KE110	P4KE110C	89.2	99.0	121.0	1	5	158.0	3.80	0.107
P4KE110A	P4KE110CA	94.0	105.0	116.0	1	5	152.0	4.00	0.107
P4KE120	P4KE120C	97.2	108.0	132.0	1	5	173.0	3.50	0.107
P4KE120A	P4KE120CA	102.0	114.0	126.0	1	5	165.0	3.60	0.107
P4KE130	P4KE130C	105.0	117.0	143.0	1	5	187.0	3.20	0.107
P4KE130A	P4KE130CA	111.0	124.0	137.0	1	5	179.0	3.30	0.107
P4KE150	P4KE150C	121.0	135.0	165.0	1	5	215.0	2.80	0.108
P4KE150A	P4KE150CA	128.0	143.0	158.0	1	5	207.0	2.90	0.108
P4KE160	P4KE160C	130.0	144.0	176.0	1	5	230.0	2.60	0.108
P4KE160A	P4KE160CA	136.0	152.0	168.0	1	5	219.0	2.70	0.108
P4KE170	P4KE170C	138.0	153.0	187.0	1	5	244.0	2.50	0.108
P4KE170A	P4KE170CA	145.0	162.0	179.0	1	5	234.0	2.60	0.108
P4KE180	P4KE180C	146.0	162.0	198.0	1	5	258.0	2.30	0.108
P4KE180A	P4KE180CA	154.0	171.0	189.0	1	5	246.0	2.40	0.108
P4KE200	P4KE200C	162.0	180.0	220.0	1	5	287.0	2.10	0.108
P4KE200A	P4KE200CA	171.0	190.0	210.0	1	5	274.0	2.20	0.108
P4KE220	P4KE220C	175.0	198.0	242.0	1	5	344.0	1.75	0.108
P4KE220A	P4KE220CA	185.0	209.0	231.0	1	5	328.0	1.83	0.108
P4KE250	P4KE250C	202.0	225.0	275.0	1	5	360.0	1.67	0.110
P4KE250A	P4KE250CA	214.0	237.0	263.0	1	5	344.4	1.75	0.110
P4KE300	P4KE300C	243.0	270.0	330.0	1	5	430.0	1.40	0.110
P4KE300A	P4KE300CA	256.0	285.0	315.0	1	5	414.0	1.45	0.110
P4KE350	P4KE350C	284.0	315.0	385.0	1	5	504.0	1.20	0.110
P4KE350A	P4KE350CA	300.0	332.0	368.0	1	5	482.0	1.25	0.110

NOTES: Suffix'C' denotes bidirectional device . Suffix'A' denotes 5% tolerance device .no suffix denotes 10% tolerance device .

1. For bidirectional devices having VR of 10volts and under ,the IR limit is doubled .