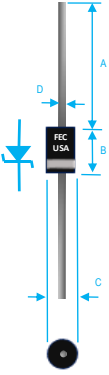


600W TRANSIENT VOLTAGE SUPPRESSOR

 <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Value in [mm]</th> </tr> <tr> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1.000[25.40]</td> <td>—</td> </tr> <tr> <td>B</td> <td>0.230[5.84]</td> <td>0.300[7.62]</td> </tr> <tr> <td>C</td> <td>0.104[2.64]</td> <td>0.140[3.56]</td> </tr> <tr> <td>D</td> <td>0.028[0.71]</td> <td>0.034[0.86]</td> </tr> </tbody> </table>	Dim.	Value in [mm]		Min.	Max.	A	1.000[25.40]	—	B	0.230[5.84]	0.300[7.62]	C	0.104[2.64]	0.140[3.56]	D	0.028[0.71]	0.034[0.86]	PRODUCT FEATURES <ol style="list-style-type: none"> 1. FLAMMABILITY CLASSIFICATION 94V-0 2. LOW ZENER IMPEDANCE 3. 600W SURGE CAPABILITY 4. FAST RESPONSE TIME: 1.0 pS FROM 0 V. TO BV 5. IR LESS THAN 1mA ABOVE 10V 6. CASE: MOLDED PLASTIC, DO15 7. DIMENSIONS IN INCHES AND (MILLIMETERS) 8. POLARITY: INDICATED BY CATHODE BAND 9. WEIGHT: 0.4 GRAMS 10. MIL-STD-202, METHOD 208 11. PULLING FORCE: 2.3 Kg 12. ROHS
Dim.		Value in [mm]																
	Min.	Max.																
A	1.000[25.40]	—																
B	0.230[5.84]	0.300[7.62]																
C	0.104[2.64]	0.140[3.56]																
D	0.028[0.71]	0.034[0.86]																

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO + 150°C

RATINGS	SYMBOL	VALUE	UNITS
PEAK POWER DISSIPATION AT TA=25°C, TP=1ms(NOTE1)	PPK	600	W
PEAK PULSE CURRENT WITH A 10/1000us WAVEFORM(NOTE 1)	IPPM	SEE TABLE	A
STEADY STATE POWER DISSIPATION AT TL=75°C, LEADS LENGTH 0.375" (NOTE2)	PM(AV)	5	W
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD(NOTE 3)	IFSM	100	A
TYPICAL THERMAL RESISTANCE JUNCTION-TO-AMBIENT	RθJA	75	°C /W

1. NON-REPETITIVE CURRENT PULSE, PER FIG.3 AND DERATED ABOVE TA=25°C PER FIG 2.
2. MOUNTED ON COPPER PAD AREA OF 1.6x1.6" (40x40mm) PER FIG. 5
3. 8.3ms SINGLE HALF SINE-WAVE, DUTY CYCLE=4 PULSES PER MINUTES MAXIMUM
4. FOR BIDIRECTIONAL USE C SUFFIX FOR 10% TOLERANCE, CA SUFFIX FOR 5% TOLERANCE
5. BREAK DOWN VOLTAGE AND PEAK REVERSE VOLTAGE ARE MEASURED @ IT

PART NUMBER	MIN BREAK DOWN VOLTAGE VBR(V)	MAX BREAK DOWN VOLTAGE VBR(V)	TEST CURRENT IT(mA)	PK REV VOLTAGE VRWM (V)	MAX REV LEAKAGE IR(uA)	MAX REV SURGE CURRENT IRSM(A)	MAX CLAMPING VOLTAGE VC(V)	MAX TEMP. COEFF. VBR(%C)
P6KE6.8(C)	6.12	7.48	10	5.5	1000	56	10.8	0.057
P6KE6.8(C)A	6.45	7.14	10	5.8	1000	57	10.5	0.057
P6KE7.5(C)	6.75	8.25	10	6.05	500	51	11.7	0.061
P6KE7.5(C)A	7.13	7.88	10	6.4	500	53	11.3	0.061
P6KE8.2(C)	7.38	9.02	10	6.63	200	48	12.5	0.065
P6KE8.2(C)A	7.79	8.61	10	7.02	200	50	12.1	0.065
P6KE9.1(C)	8.19	10	1	7.37	50	44	13.8	0.068
P6KE9.1(C)A	8.65	9.55	1	7.78	50	45	13.4	0.068
P6KE10(C)	9	11	1	8.1	10	40	15	0.073
P6KE10(C)A	9.5	10.5	1	8.55	10	41	14.5	0.073
P6KE11(C)	9.9	12.1	1	8.92	5	37	16.2	0.075
P6KE11(C)A	10.5	11.6	1	9.4	5	38	15.6	0.075
P6KE12(C)	10.8	13.2	1	9.72	5	35	17.3	0.078
P6KE12(C)A	11.4	12.6	1	10.2	5	36	16.7	0.078



P6KE6.8(C) THRU P6KE540(C)A SPECIFICATIONS

Rev. A

PART NUMBER	MIN BREAK DOWN VOLTAGE VBR(V)	MAX BREAK DOWN VOLTAGE VBR(V)	TEST CURRENT IT(mA)	PK REV VOLTAGE VRWM (V)	MAX REV LEAKAGE IR(uA)	MAX REV SURGE CURRENT IRSM(A)	MAX CLAMPING VOLTAGE VC(V)	MAX TEMP. COEFF. VBR(%C)
P6KE13(C)	11.7	14.3	1	10.5	5	32	19	0.081
P6KE13(C)A	12.4	13.7	1	11.1	5	33	18.2	0.081
P6KE15(C)	13.5	16.5	1	12.1	5	27	22	0.084
P6KE15(C)A	14.3	15.8	1	12.8	5	28	21.2	0.084
P6KE16(C)	14.4	17.6	1	12.9	5	26	23.5	0.086
P6KE16(C)A	15.2	16.8	1	13.6	5	27	22.5	0.086
P6KE18(C)	16.2	19.8	1	14.5	5	23	26.5	0.088
P6KE18(C)A	17.1	18.9	1	15.3	5	24	25.2	0.088
P6KE20(C)	18	22	1	16.2	5	21	29.1	0.09
P6KE20(C)A	19	21	1	17.1	5	22	27.7	0.09
P6KE22(C)	19.8	24.2	1	17.8	5	19	31.9	0.092
P6KE22(C)A	20.9	23.1	1	18.8	5	20	30.6	0.092
P6KE24(C)	21.6	26.4	1	19.4	5	17	34.7	0.094
P6KE24(C)A	22.8	25.2	1	20.5	5	18	33.2	0.094
P6KE27(C)	24.3	29.7	1	21.8	5	15	39.1	0.096
P6KE27(C)A	25.7	28.4	1	23.1	5	16	37.5	0.096
P6KE30(C)	27	33	1	24.3	5	14	43.5	0.097
P6KE30(C)A	28.5	31.5	1	25.6	5	14.4	41.4	0.097
P6KE33(C)	29.7	36.3	1	26.8	5	12.6	47.7	0.098
P6KE33(C)A	31.4	34.7	1	28.2	5	13.2	45.7	0.098
P6KE36(C)	32.4	39.6	1	29.1	5	11.6	52	0.099
P6KE36(C)A	34.2	37.8	1	30.8	5	12	49.9	0.099
P6KE39(C)	35.1	42.9	1	31.6	5	10.6	56.4	0.1
P6KE39(C)A	37.1	41	1	33.3	5	11.2	53.9	0.1
P6KE43(C)	38.7	47.3	1	34.8	5	9.6	61.9	0.101
P6KE43(C)A	40.9	45.2	1	36.8	5	10.1	59.3	0.101
P6KE47(C)	42.3	51.7	1	38.1	5	8.9	67.8	0.101
P6KE47(C)A	44.7	49.4	1	40.2	5	9.3	64.8	0.101
P6KE51(C)	45.9	56.1	1	41.3	5	8.2	73.5	0.102
P6KE51(C)A	48.5	53.6	1	43.6	5	8.6	70.1	0.102
P6KE56(C)	50.4	61.6	1	45.4	5	7.4	80.5	0.103
P6KE56(C)A	53.2	58.8	1	47.8	5	7.8	77	0.103
P6KE62(C)	55.8	68.2	1	50.2	5	6.8	89	0.104
P6KE62(C)A	58.9	65.1	1	53	5	7.1	85	0.104
P6KE68(C)	61.2	74.8	1	55.1	5	6.1	98	0.104
P6KE68(C)A	64.6	71.4	1	58.1	5	6.5	92	0.104
P6KE75(C)	67.5	82.5	1	60.7	5	5.5	108	0.105
P6KE75(C)A	71.3	78.8	1	64.1	5	5.8	103	0.105
P6KE82(C)	73.8	90.2	1	66.4	5	5.1	118	0.105
P6KE82(C)A	77.9	86.1	1	70.1	5	5.3	113	0.105
P6KE91(C)	81.9	100	1	73.7	5	4.5	131.8	0.106
P6KE91(C)A	86.5	95.5	1	77.8	5	4.8	125	0.106
P6KE100(C)	90	110	1	81	5	4.2	144	0.106
P6KE100(C)A	95	105	1	85.5	5	4.4	137	0.106
P6KE110(C)	99	121	1	89.2	5	3.8	158	0.107
P6KE110(C)A	105	116	1	94	5	4	152	0.107
P6KE120(C)	108	132	1	97.2	5	3.5	173	0.107
P6KE120(C)A	114	126	1	102	5	3.6	165	0.107
P6KE130(C)	117	143	1	105	5	3.2	187	0.107



P6KE6.8(C) THRU P6KE540(C)A SPECIFICATIONS

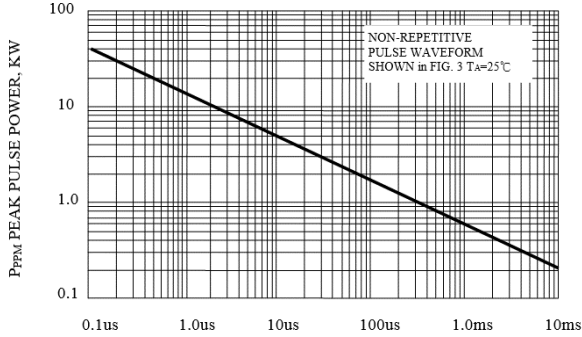
Rev. A

PART NUMBER	MIN BREAK DOWN VOLTAGE VBR(V)	MAX BREAK DOWN VOLTAGE VBR(V)	TEST CURRENT IT(mA)	PK REV VOLTAGE VRWM (V)	MAX REV LEAKAGE IR(uA)	MAX REV SURGE CURRENT IRSM(A)	MAX CLAMPING VOLTAGE VC(V)	MAX TEMP. COEFF. VBR(%C)
P6KE130(C)A	124	137	1	111	5	3.3	179	0.107
P6KE150(C)	135	165	1	121	5	2.8	215	0.108
P6KE150(C)A	143	158	1	128	5	2.9	207	0.108
P6KE160(C)	144	176	1	130	5	2.6	230	0.108
P6KE160(C)A	152	168	1	136	5	2.7	219	0.108
P6KE170(C)	153	187	1	138	5	2.5	244	0.108
P6KE170(C)A	162	179	1	145	5	2.6	234	0.108
P6KE180(C)	162	198	1	146	5	2.3	258	0.108
P6KE180(C)A	171	189	1	154	5	2.4	246	0.108
P6KE200(C)	180	220	1	162	5	2.1	287	0.108
P6KE200(C)A	190	210	1	171	5	2.2	274	0.108
P6KE220(C)	198	242	1	175	5	1.75	344	0.108
P6KE220(C)A	209	231	1	185	5	1.83	328	0.108
P6KE250(C)	225	275	1	202	5	1.67	360	0.11
P6KE250(C)A	237	263	1	214	5	1.75	344	0.11
P6KE300(C)	270	330	1	243	5	1.4	430	0.11
P6KE300(C)A	285	315	1	256	5	1.45	414	0.11
P6KE350(C)	315	385	1	284	5	1.2	504	0.11
P6KE350(C)A	332	368	1	300	5	1.25	482	0.11
P6KE400(C)	360	440	1	324	5	1.05	574	0.11
P6KE400(C)A	380	420	1	342	5	1.1	548	0.11
P6KE440(C)	396	484	1	356	5	0.95	630	0.11
P6KE440(C)A	418	462	1	376	5	1	600	0.11
P6KE480(C)	432	528	1	389	5	0.88	686	0.11
P6KE480(C)A	456	504	1	408	5	0.91	658	0.11
P6KE510(C)	459	561	1	413	5	0.82	729	0.11
P6KE510(C)A	485	535	1	434	5	0.86	698	0.11
P6KE540(C)	486	594	1	437	5	0.78	772	0.11
P6KE540(C)A	513	567	1	459	5	0.81	740	0.11

1. VBR MEASURED AFTER IT APPLIED FOR 300 mS, IT=SQUARE WAVE PULSE OR EQUIVALENT
2. SURGE CURRENT WAVEFORM PER FIGURE 3 AND DERATED PER FIGUE 2
3. VF= 3.5V AT IF=50A (P6KE6.8(C) THRU P6KE200(C)A) VF=6.5V AT IF=50A (P6KE220(C) THRU P6KE540(C)A) ON 1/2 SQUARE OR EQUIVALENT SIN WAVE PW = 8.3ms, DUTY CYCLE=4 PULSES PER MINUTE MAXIMUM
4. FOR BIPOLAR TYPES HAVING VRWM OF 10 VOLTS AND UNDER, THE IR LIMIT IS DOUBLED

RATING AND CHARACTERISTIC CURVES

FIG. 1 - PEAK PULSE POWER RATING CURVE



td, PULSE WIDTH, sec.
FIG. 3 - PULSE WAVEFORM

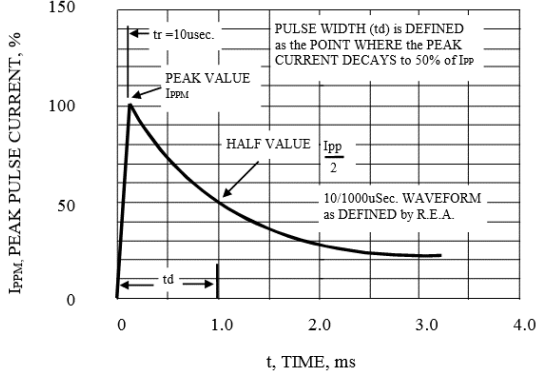
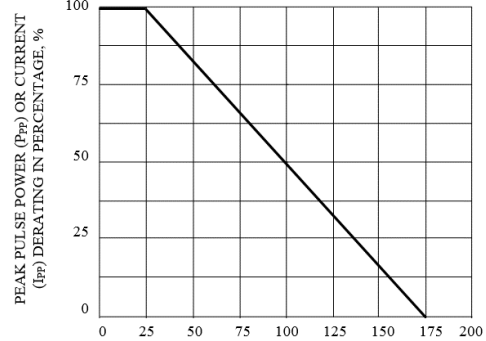


FIG. 2 - PULSE DERATING CURVE



TA, AMBIENT TEMPERATURE, °C
FIG. 4 - TYPICAL JUNCTION CAPACITANCE

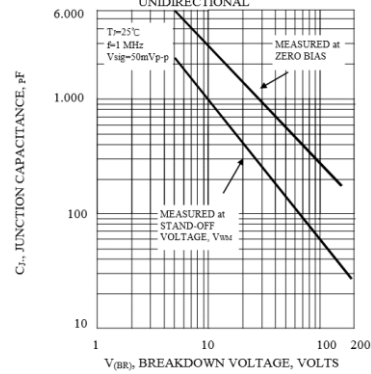


FIG. 5 - STEADY STATE POWER DERATING CURVE

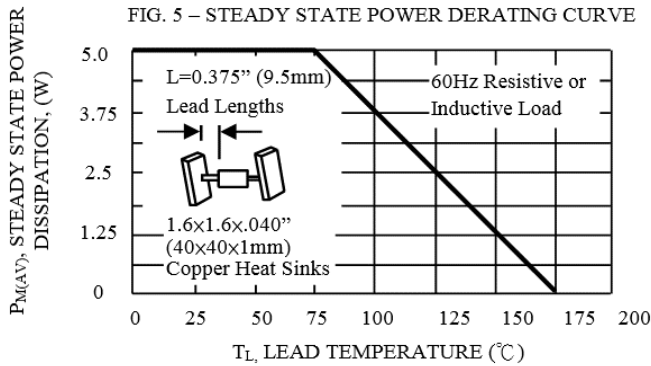
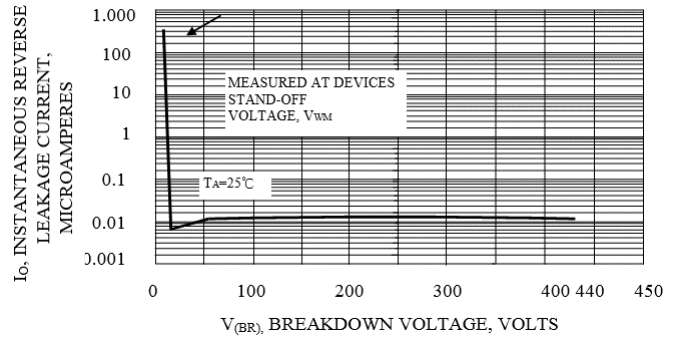


FIG. 6 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS





P6KE6.8(C) THRU P6KE540(C)A SPECIFICATIONS

Rev. A

