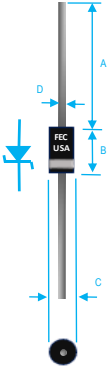


600W TRANSIENT VOLTAGE SUPPRESSOR

 <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>0.166[4.22]</td> <td>0.205[5.21]</td> </tr> <tr> <td>C</td> <td>0.080[2.03]</td> <td>0.107[2.72]</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	0.166[4.22]	0.205[5.21]	C	0.080[2.03]	0.107[2.72]	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. 400W 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, DO-41 7. DIMENSIONS IN INCHES AND (MILLIMETERS) 8. POLARITY: INDICATED BY CATHODE BAND 9. WEIGHT: 0.34 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	0.166[4.22]	0.205[5.21]																
C	0.080[2.03]	0.107[2.72]																
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	MIN. 400	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)	1	W
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD(NOTE 3)	IFSM	40	A
TYPICAL THERMAL RESISTANCE JUNCTION-TO-AMBIENT	RθJA	100	°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(μA)	MAX REV SURGE CURRENT IRSM(A)	MAX CLAMPING VOLTAGE VC(V)	MAX TEMP. COEFF. VBR(%/C)
P4KE6.8(C)	6.12	7.48	10	5.5	1000	38	10.8	0.057
P4KE6.8(C)A	6.45	7.14	10	5.8	1000	40	10.5	0.057
P4KE7.5(C)	6.75	8.25	10	6.05	500	36	11.7	0.061
P4KE7.5(C)A	7.13	7.88	10	6.4	500	37	11.3	0.061
P4KE8.2(C)	7.38	9.02	10	6.63	200	33	12.5	0.065
P4KE8.2(C)A	7.79	8.61	10	7.02	200	35	12.1	0.065
P4KE9.1(C)	8.19	10	1	7.37	50	30	13.8	0.068
P4KE9.1(C)A	8.65	9.55	1	7.78	50	31	13.4	0.068
P4KE10(C)	9	11	1	8.1	10	28	15	0.073
P4KE10(C)A	9.5	10.5	1	8.55	10	29	14.5	0.073
P4KE11(C)	9.9	12.1	1	8.92	5	26	16.2	0.075
P4KE11(C)A	10.5	11.6	1	9.4	5	27	15.6	0.076
P4KE12(C)	10.8	13.2	1	9.72	5	24	17.3	0.078
P4KE12(C)A	11.4	12.6	1	10.2	5	25	16.7	0.078



P4KE6.8 THRU P6KE540A SPECIFICATIONS

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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)
P4KE13(C)	11.7	14.3	1	10.5	5	22	19	0.081
P4KE13(C)A	12.4	13.7	1	11.1	5	23	18.2	0.081
P4KE15(C)	13.5	16.5	1	12.1	5	19	22	0.084
P4KE15(C)A	14.3	15.8	1	12.8	5	20	21.2	0.084
P4KE16(C)	14.4	17.6	1	12.9	5	18	23.5	0.086
P4KE16(C)A	15.2	16.8	1	13.6	5	19	22.5	0.086
P4KE18(C)	16.2	19.8	1	14.5	5	16	26.5	0.088
P4KE18(C)A	17.1	18.9	1	15.3	5	17	25.5	0.088
P4KE20(C)	18	22	1	16.2	5	14	29.1	0.09
P4KE20(C)A	19	21	1	17.1	5	15	27.7	0.09
P4KE22(C)	19.8	24.2	1	17.8	5	13	31.9	0.092
P4KE22(C)A	20.9	23.1	1	18.8	5	14	30.6	0.092
P4KE24(C)	21.6	26.4	1	19.4	5	12	34.7	0.094
P4KE24(C)A	22.8	25.2	1	20.5	5	13	33.2	0.094
P4KE27(C)	24.3	29.7	1	21.8	5	11	39.1	0.096
P4KE27(C)A	25.7	28.4	1	23.1	5	11.2	37.5	0.096
P4KE30(C)	27	33	1	24.3	5	10	43.5	0.097
P4KE30(C)A	28.5	31.5	1	25.6	5	10	41.4	0.097
P4KE33(C)	29.7	36.3	1	26.8	5	9	47.7	0.098
P4KE33(C)A	31.4	34.7	1	28.2	5	9	45.7	0.098
P4KE36(C)	32.4	39.6	1	29.1	5	8	52	0.099
P4KE36(C)A	34.2	37.8	1	30.8	5	8.4	49.9	0.099
P4KE39(C)	35.1	42.9	1	31.6	5	7.4	56.4	0.1
P4KE39(C)A	37.1	41	1	33.3	5	7.8	53.9	0.1
P4KE43(C)	38.7	47.3	1	34.8	5	6.8	61.9	0.101
P4KE43(C)A	40.9	45.2	1	36.8	5	7.1	59.3	0.101
P4KE47(C)	42.3	51.7	1	38.1	5	6.2	67.8	0.101
P4KE47(C)A	44.7	49.4	1	40.2	5	6.5	64.8	0.101
P4KE51(C)	45.9	56.1	1	41.3	5	5.7	73.5	0.102
P4KE51(C)A	48.5	53.6	1	43.6	5	6	70.1	0.102
P4KE56(C)	50.4	61.6	1	45.4	5	5.2	80.5	0.103
P4KE56(C)A	53.2	58.8	1	47.8	5	5.5	77	0.103
P4KE62(C)	55.8	68.2	1	50.2	5	4.7	89	0.104
P4KE62(C)A	58.9	65.1	1	53	5	5	85	0.104
P4KE68(C)	61.2	74.8	1	55.1	5	4.3	98	0.104
P4KE68(C)A	64.6	71.4	1	58.1	5	4.6	92	0.104
P4KE75(C)	67.5	82.5	1	60.7	5	3.9	108	0.105
P4KE75(C)A	71.3	78.8	1	64.1	5	4.1	103	0.105
P4KE82(C)	73.8	90.2	1	66.4	5	3.6	118	0.105
P4KE82(C)A	77.9	86.1	1	70.1	5	3.7	113	0.105
P4KE91(C)	81.9	100	1	73.7	5	3.2	131.8	0.106
P4KE91(C)A	86.5	95.5	1	77.8	5	3.4	125	0.106
P4KE100(C)	90	110	1	81	5	2.9	144	0.106
P4KE100(C)A	95	105	1	85.5	5	3.1	137	0.106
P4KE110(C)	99	121	1	89.2	5	2.7	158	0.107
P4KE110(C)A	105	116	1	94	5	2.8	152	0.107
P4KE120(C)	108	132	1	97.2	5	2.4	173	0.107
P4KE120(C)A	114	126	1	102	5	2.5	165	0.107
P4KE130(C)	117	143	1	105	5	2.2	187	0.107



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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)
P4KE130(C)A	124	137	1	111	5	2.3	179	0.107
P4KE150(C)	135	165	1	121	5	2	215	0.108
P4KE150(C)A	143	158	1	128	5	2	207	0.108
P4KE160(C)	144	176	1	130	5	1.8	230	0.108
P4KE160(C)A	152	168	1	136	5	1.9	219	0.108
P4KE170(C)	153	187	1	138	5	1.7	244	0.108
P4KE170(C)A	162	179	1	145	5	1.8	234	0.108
P4KE180(C)	162	198	1	146	5	1.6	258	0.108
P4KE180(C)A	171	189	1	154	5	1.7	246	0.108
P4KE200(C)	180	220	1	162	5	1.5	287	0.108
P4KE200(C)A	190	210	1	171	5	1.53	274	0.108
P4KE220(C)	198	242	1	175	5	1.16	344	0.108
P4KE220(C)A	209	231	1	185	5	1.22	328	0.108
P4KE250(C)	225	275	1	202	5	1.11	360	0.11
P4KE250(C)A	237	263	1	214	5	1.16	344	0.11
P4KE300(C)	270	330	1	243	5	0.93	430	0.11
P4KE300(C)A	285	315	1	256	5	0.97	414	0.11
P4KE350(C)	315	385	1	284	5	0.79	504	0.11
P4KE350(C)A	332	368	1	300	5	0.83	482	0.11
P4KE400(C)	360	440	1	324	5	0.7	574	0.11
P4KE400(C)A	380	420	1	342	5	0.73	548	0.11
P4KE440(C)	396	484	1	356	5	0.64	630	0.11
P4KE440(C)A	418	462	1	376	5	0.67	600	0.11
P4KE480(C)	432	528	1	389	5	0.58	686	0.11
P4KE480(C)A	456	504	1	408	5	0.61	658	0.11
P4KE510(C)	459	561	1	413	5	0.55	729	0.11
P4KE510(C)A	485	535	1	434	5	0.57	698	0.11
P4KE540(C)	486	594	1	437	5	0.52	772	0.11
P4KE540(C)A	513	567	1	459	5	0.54	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=25A (P4KE6.8(C) THRU P4KE200(C)A)

VF = 6.5V AT IF=25A (P4KE220(C) THRU P4KE540(C)A) ON 1/2 SQUARE OR EQUIVALENT SINE 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

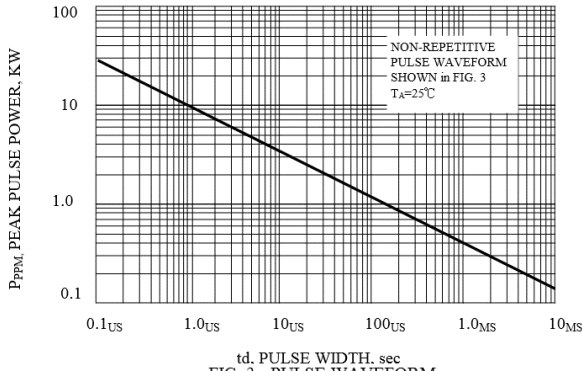


FIG. 2 - PULSE DERATING CURVE

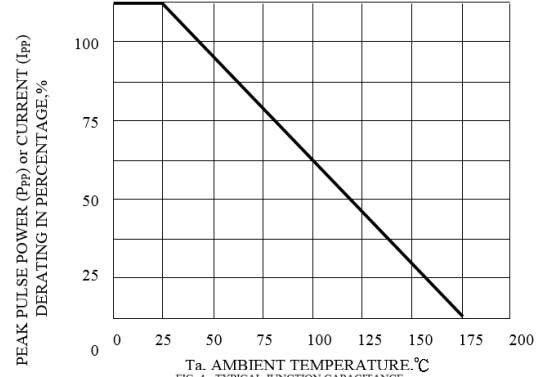


FIG. 3 - PULSE WAVEFORM

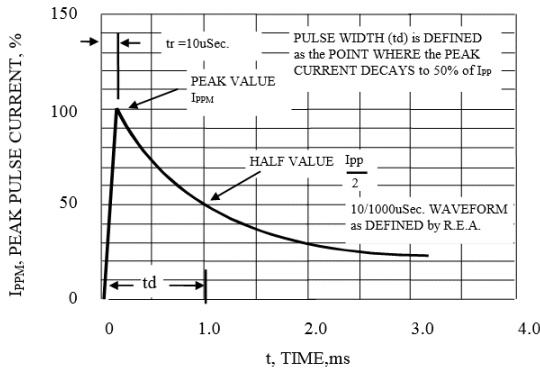


FIG. 4 - TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL

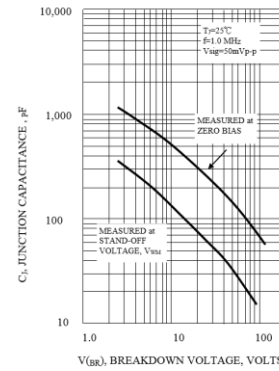


FIG. 5 - STEADY STATE POWER DERATING CURVE

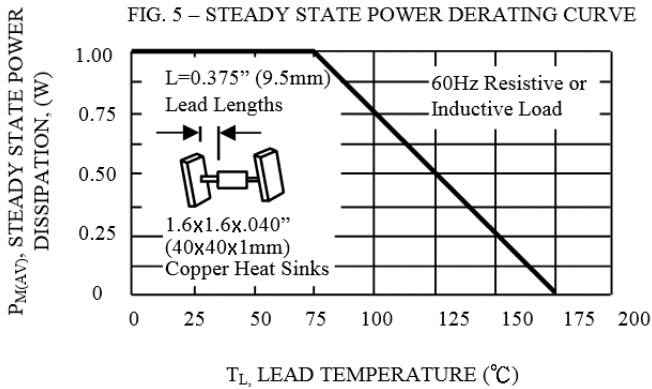
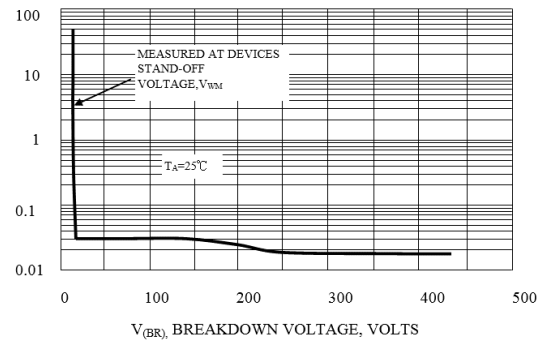


FIG. 6 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS





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FIG. 7 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL ONLY

