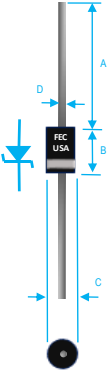


500W TRANSIENT VOLTAGE SUPPRESSOR

 <table border="1" style="margin-left: 20px;"> <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]	<h3>PRODUCT FEATURES</h3> <ol style="list-style-type: none"> 1. FLAMMABILITY CLASSIFICATION 94V-0 2. LOW INCREMENTAL SURGE RESISTANCE 3. 500W PEAK PULSE POWER CAPABILITY 4. FAST RESPONSE TIME: 1.0 pS FROM 0 V. TO BV (50 nS) 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 PULSE POWER DISSIPATION ON 10/1000MS WAVEFORM (NOTE 1, FIG. 1)	PPPM	MIN. 500	W
PEAK PULSE CURRENT OF 0N 10/1000MS WAVEFORM (NOTE 1,FIG. 3)	IPPM	SEE TABLE	A
STEADY STATE POWER DISSIPATION AT TL=75°C, LEADS LENGTH 0.375" (NOTE2)	PM(AV)	3	W
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD(NOTE 3)	IFSM	70	A
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE AT 35.0A FOR UNIDIRECTIONAL ONLY (NOTE 3)	VF	3.5	V

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 OR EQUIVALENT SQUARE WAVE, DUTY CYCLE=4 PULSES PER MINUTE 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)
SA5.0(C)	6.4	7.3	10	5	600	52	9.6	5
SA5.0(C)A	6.4	7	10	5	600	54.3	9.2	5
SA6.0(C)	6.67	8.15	10	6	600	43.9	11.4	5
SA6.0(C)A	6.67	7.37	10	6	600	48.5	10.3	5
SA6.5(C)	7.22	8.82	10	6.5	400	40.7	12.3	5
SA6.5(C)A	7.22	7.98	10	6.5	400	44.7	11.2	5
SA7.0(C)	7.78	9.51	10	7	150	37.8	13.3	6
SA7.0(C)A	7.78	8.6	10	7	150	41.7	12	6
SA7.5(C)	8.33	10.2	1	7.5	50	35	14.3	7
SA7.5(C)A	8.33	9.21	1	7.5	50	38.8	12.9	7
SA8.0(C)	8.89	10.9	1	8	25	33.3	15	7
SA8.0(C)A	8.89	9.83	1	8	25	36.7	13.6	7
SA8.5(C)	9.44	11.5	1	8.5	10	31.4	15.9	8
SA8.5(C)A	9.44	10.4	1	8.5	10	34.7	14.4	8



SA5.0(C) THRU SA170(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)
SA9.0(C)	10	12.2	1	9	5	29.5	16.9	9
SA9.0(C)A	10	11.1	1	9	5	32.5	15.4	9
SA10(C)	11.1	13.6	1	10	1	26.6	18.8	10
SA10(C)A	11.1	12.3	1	10	1	29.4	17	10
SA11(C)	12.2	14.9	1	11	1	24.9	20.1	11
SA11(C)A	12.2	13.5	1	11	1	27.4	18.2	11
SA12(C)	13.3	16.3	1	12	1	22.7	22	12
SA12(C)A	13.3	14.7	1	12	1	25.1	19.9	12
SA13(C)	14.4	17.6	1	13	1	21	23.8	13
SA13(C)A	14.4	15.9	1	13	1	23.2	21.5	13
SA14(C)	15.6	19.1	1	14	1	19.4	25.8	14
SA14(C)A	15.6	17.2	1	14	1	21.5	23.2	14
SA15(C)	16.7	20.4	1	15	1	18.8	26.9	16
SA15(C)A	16.7	18.5	1	15	1	20.6	24.4	16
SA16(C)	17.8	21.8	1	16	1	17.6	28.8	19
SA16(C)A	17.8	19.7	1	16	1	19.2	26	17
SA17(C)	18.9	23.1	1	17	1	16.4	30.5	20
SA17(C)A	18.9	20.9	1	17	1	18.1	27.6	19
SA18(C)	20	24.4	1	18	1	15.5	32.2	21
SA18(C)A	20	22.1	1	18	1	17.2	29.2	20
SA20(C)	22.2	27.1	1	20	1	13.9	35.8	25
SA20(C)A	22.2	24.5	1	20	1	15.4	32.4	23
SA22(C)	24.4	29.8	1	22	1	12.7	39.4	28
SA22(C)A	24.4	26.9	1	22	1	14.1	35.5	25
SA24(C)	26.7	32.6	1	24	1	11.6	43	31
SA24(C)A	26.7	29.5	1	24	1	12.8	38.9	28
SA26(C)	28.9	35.3	1	26	1	10.7	46.6	31
SA26(C)A	28.9	31.9	1	26	1	11.9	42.1	30
SA28(C)	31.1	38	1	28	1	9.9	50.1	35
SA28(C)A	31.1	34.4	1	28	1	11	45.4	31
SA30(C)	33.3	40.7	1	30	1	9.3	53.5	39
SA30(C)A	33.3	36.8	1	30	1	10.3	48.4	36
SA33(C)	36.7	44.9	1	33	1	8.6	59	42
SA33(C)A	36.7	40.6	1	33	1	9.4	53.3	39
SA36(C)	40	48.9	1	36	1	7.8	64.3	46
SA36(C)A	40	44.2	1	36	1	8.6	58.1	41
SA40(C)	44.4	54.3	1	40	1	7	71.4	51
SA40(C)A	44.4	49.1	1	40	1	7.8	64.5	46
SA43(C)	47.8	58.4	1	43	1	6.5	76.7	55
SA43(C)A	47.8	52.8	1	43	1	7.2	69.4	50
SA45(C)	50	61.1	1	45	1	6.2	80.3	58
SA45(C)A	50	55.3	1	45	1	6.9	72.7	52
SA48(C)	53.3	65.2	1	48	1	5.8	85.5	63
SA48(C)A	53.3	58.9	1	48	1	6.5	77.4	56
SA51(C)	56.7	69.3	1	51	1	5.5	91.1	66
SA51(C)A	56.7	62.7	1	51	1	6.1	82.4	61
SA54(C)	60	73.3	1	54	1	5.2	96.3	71
SA54(C)A	60	66.3	1	54	1	5.7	87.1	65
SA58(C)	64.4	78.7	1	58	1	4.9	103	78



SA5.0(C) THRU SA170(C)A SPECIFICATIONS

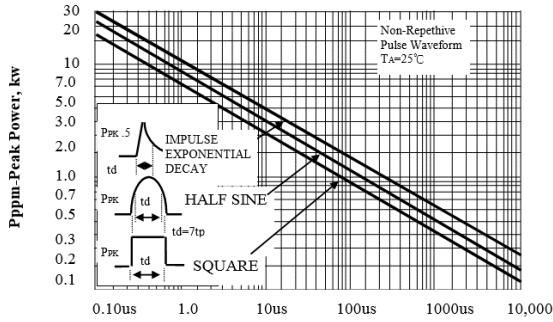
Rev. A

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)
SA58(C)A	64.4	71.2	1	58	1	5.3	93.6	70
SA60(C)	66.7	81.5	1	60	1	4.7	107	80
SA60(C)A	66.7	73.7	1	60	1	5.2	96.8	71
SA64(C)	71.1	86.9	1	64	1	4.4	114	86
SA64(C)A	71.1	78.6	1	64	1	4.9	103	76
SA70(C)	77.8	95.1	1	70	1	4	125	94
SA70(C)A	77.8	86	1	70	1	4.4	113	85
SA75(C)	83.3	102	1	75	1	3.7	134	101
SA75(C)A	83.3	92.1	1	75	1	4.1	121	91
SA78(C)	86.7	106	1	78	1	3.6	139	105
SA78(C)A	86.7	95.8	1	78	1	4	126	95
SA85(C)	94.4	115	1	85	1	3.3	151	114
SA85(C)A	94.4	104	1	85	1	3.6	137	103
SA90(C)	100	122	1	90	1	3.1	160	121
SA90(C)A	100	111	1	90	1	3.4	146	110
SA100(C)	111	136	1	100	1	2.8	179	135
SA100(C)A	111	123	1	100	1	3.1	162	123
SA110(C)	122	149	1	110	1	2.6	196	148
SA110(C)A	122	135	1	110	1	2.8	177	133
SA120(C)	133	163	1	120	1	2.3	214	162
SA120(C)A	133	147	1	120	1	2	193	146
SA130(C)	144	176	1	130	1	2.2	230	175
SA130(C)A	144	159	1	130	1	2.4	209	158
SA150(C)	167	204	1	150	1	1.9	268	203
SA150(C)A	167	185	1	150	1	2.1	243	184
SA160(C)	178	218	1	160	1	1.7	257	217
SA160(C)A	178	197	1	160	1	1.9	259	196
SA170(C)	189	231	1	170	1	1.6	304	230
SA170(C)A	189	209	1	170	1	1.8	275	208

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. FOR BIDIRECTIONAL TYPES WITH VR OF 10VOLTS AND LESS, THE ID LIMIT IS DOUBLE

RATING AND CHARACTERISTIC CURVES

FIG. 1 - PEAK PULSE POWER RATING CURVE



td, Pulse Width-us

FIG. 3 - PULSE WAVEFORM

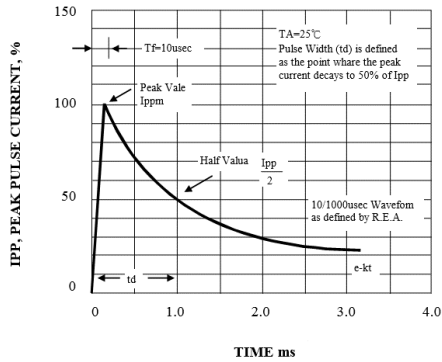
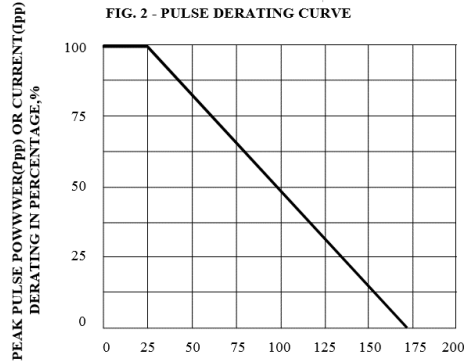


FIG. 2 - PULSE DERATING CURVE



TA, AMBIENT TEMPERATURE, °C

FIG. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL ONLY

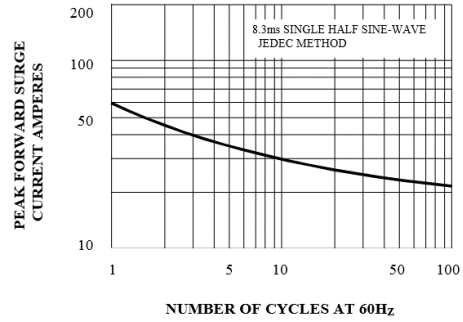


FIG. 5 - STEADY STATE POWER DERATING CURVE

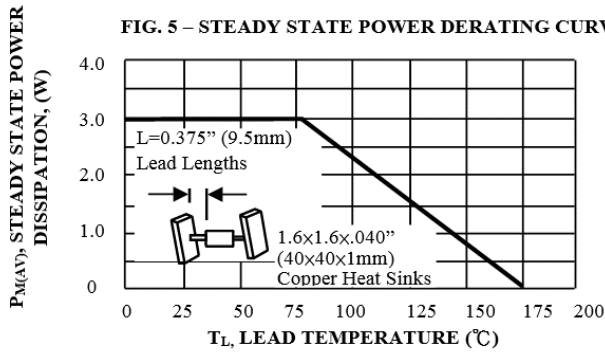
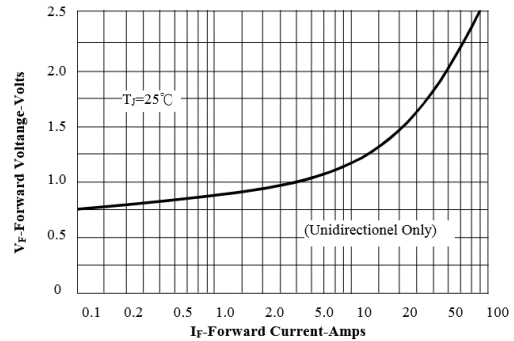


FIG. 6 - INSTANTANEOUS FORWARD VOLTAGE CHARACTERISTICS CURVE





SA5.0(C) THRU SA170(C)A SPECIFICATIONS

Rev. A

