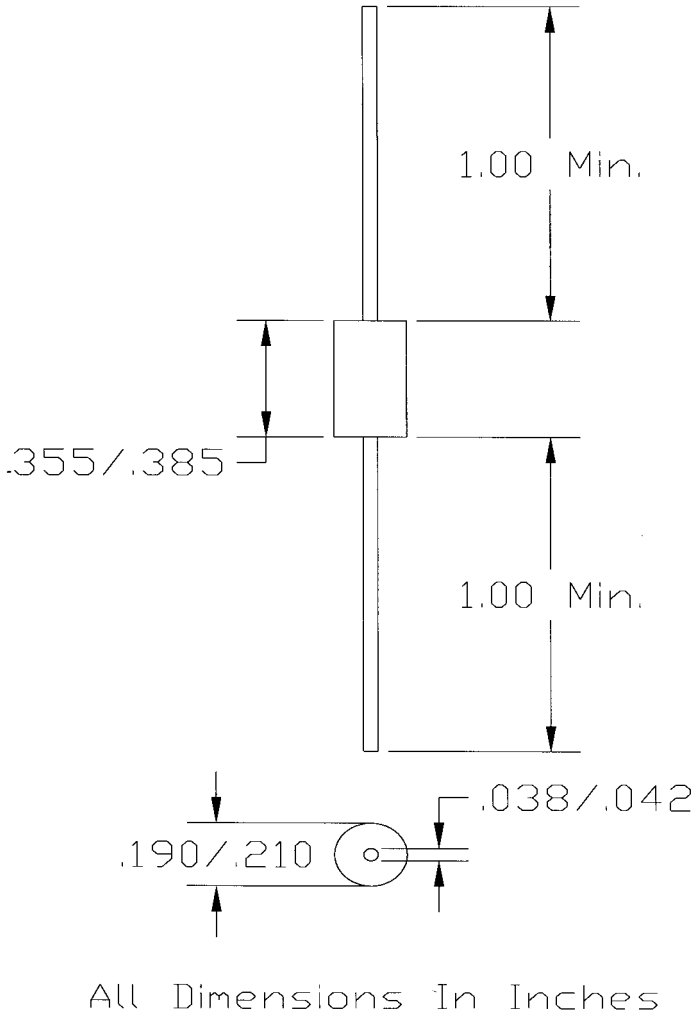
SUSSEX
SEMICONDUCTOR, INC.
12251 TOWNE LAKE DRIVE, FORT MYERS, FLORIDA, 33913 • TEL: (941) 768-6800 • FAX: (941) 768-6868

1.5KE SERIES 1500 WATT TRANSIENT SUPPRESSORS



1.5KE SERIES TRANSIENT SUPPRESSORS

VOLTAGES - 6.8 TO 440 VOLTS

1500 WATT MAXIMUM POWER DISSIPATION

1.5KE SERIES DEVICE SPECIFICATIONS

- Built With Sussex Glass Passivated Dies
- Each Device Individually Inspected
- Molded Epoxy Package
- Polarity Indicated By Solvent Resistant Marking
- Operating Temperature: -55 to 175°C
- Storage Temperature: -55 to 175°C
- Marked With Sussex Logo, Part Number, and Cathode Band on Unipolar Types
- Silver Plated Leads, Solderable Per MIL-STD-750
- Underwriter Laboratories Approved

CUSTOM ORDERING SPECIFIER

DIE SPECIFICATIONS

1.5KE

DEVICE PART NUMBER

REVERSE BREAKDOWN VOLTAGE (VBR)

- ♦ BLANK INDICATES UNIPOLAR DEVICE ±10% ON V_{BR}
- ♦ A INDICATES UNIPOLAR DEVICE ±5% ON V_{BR}
- ♦ C INDICATES BIPOLAR DEVICE ±10% ON V_{BR}
- ♦ CA INDICATES BIPOLAR DEVICE ±5% ON V_{BR}

TABLE 6A - 1.5KE SERIES 1500 WATT TRANSIENT SUPPRESSOR ELECTRICAL SPECIFICATIONS (NOTE 1)

JEDEC PART NUMBERS	SUSSEX PART NUMBERS 1500 WATT 1.5KE SERIES	STANDOFF VOLTAGE (V_{SO}) Volts	MAX. REVERSE LEAKAGE (I_R)@V_{SO} (NOTE 2) µA	REVERSE BREAKDOWN VOLTAGE (V_{BR}) @ I_T		TEST CURRENT (I_T) mA	MAX. CLAMPING VOLTAGE (V_{CL}) @ PEAK PULSE CURRENT (I_{PP}) (NOTE 3)		MAX. TEMP. COEFFICIENT OF V_{BR} (%/°C)
				MIN. Volts	MAX. Volts		V_{CL} Volts	I_{PP} Amps	
1N6267	1.5KE6.8	5.50	1000	6.12	7.48	10	10.8	139	0.057
1N6267A	1.5KE6.8A	5.80	1000	6.45	7.14	10	10.5	143	0.057
1N6268	1.5KE7.5	6.05	500	6.75	8.25	10	11.7	128	0.061
1N6268A	1.5KE7.5A	6.40	500	7.13	7.88	10	11.3	132	0.061
1N6269	1.5KE8.2	6.63	200	7.38	9.02	10	12.5	120	0.065
1N6269A	1.5KE8.2A	7.02	200	7.79	8.61	10	12.1	124	0.065
1N6270	1.5KE9.1	7.37	50	8.19	10.00	1	13.8	109	0.068
1N6270A	1.5KE9.1A	7.78	50	8.65	9.55	1	13.4	112	0.068
1N6271	1.5KE10	8.10	10	9.00	11.00	1	15.0	100	0.073
1N6271A	1.5KE10A	8.55	10	9.50	10.50	1	14.5	103	0.073
1N6272	1.5KE11	8.92	5.0	9.90	12.10	1	16.2	93	0.075
1N6272A	1.5KE11A	9.40	5.0	10.50	11.60	1	15.6	96	0.075
1N6273	1.5KE12	9.72	5.0	10.80	13.20	1	17.3	87	0.078
1N6273A	1.5KE12A	10.20	5.0	11.40	12.60	1	16.7	90	0.078
1N6274	1.5KE13	10.50	5.0	11.70	14.30	1	19.0	79	0.061
1N6274A	1.5KE13A	11.10	5.0	12.40	13.70	1	18.2	82	0.081
1N6275	1.5KE15	12.10	5.0	13.50	16.50	1	22.0	68	0.084
1N6275A	1.5KE15A	12.80	5.0	14.30	15.80	1	21.2	71	0.084
1N6276	1.5KE16	12.90	5.0	14.40	17.60	1	23.5	64	0.086
1N6276A	1.5KE16A	13.60	5.0	15.20	16.80	1	22.5	67	0.086
1N6277	1.5KE18	14.50	5.0	16.20	19.80	1	26.5	56.5	0.088
1N6277A	1.5KE18A	15.30	5.0	17.10	18.90	1	25.2	59.5	0.088
1N6278	1.5KE20	16.20	5.0	18.00	22.00	1	29.1	51.5	0.090
1N6278A	1.5KE20A	17.10	5.0	19.00	21.00	1	27.7	54	0.090
1N6279	1.5KE22	17.80	5.0	19.80	24.20	1	31.9	47	0.092
1N6279A	1.5KE22A	18.80	5.0	20.90	23.10	1	30.6	49	0.092
1N6280	1.5KE24	19.40	5.0	21.60	26.40	1	34.7	43	0.091
1N6280A	1.5KE24A	20.50	5.0	22.80	25.20	1	33.2	45	0.094
1N6281	1.5KE27	21.80	5.0	24.30	29.70	1	39.1	38.5	0.096
1N6281A	1.5KE27A	23.10	5.0	25.70	28.40	1	37.5	40	0.096
1N6282	1.5KE30	24.30	5.0	27.00	33.00	1	43.5	34.5	0.097
1N6282A	1.5KE30A	25.60	5.0	28.50	31.50	1	41.4	36	0.097
1N6283	1.5KE33	26.80	5.0	29.70	36.30	1	47.7	31.5	0.098
1N6283A	1.5KE33A	28.20	5.0	31.40	34.70	1	45.7	33	0.098
1N6284	1.5KE36	29.10	5.0	32.40	39.60	1	52.0	29	0.099
1N6284A	1.5KE36A	30.80	5.0	34.20	37.80	1	49.9	30	0.099
1N6285	1.5KE39	31.60	5.0	35.10	42.90	1	56.4	26.5	0.100
1N6285A	1.5KE39A	33.30	5.0	37.10	41.00	1	53.9	28	0.100
1N6286	1.5KE43	34.80	5.0	38.70	47.30	1	61.9	24	0.101
1N6286A	1.5KE43A	36.80	5.0	40.90	45.20	1	59.3	25	0.101
1N6287	1.5KE47	36.10	5.0	42.30	51.70	1	67.8	22.2	0.101
1N6287A	1.5KE47A	40.20	5.0	44.70	49.40	1	64.8	23.2	0.101
1N6288	1.5KE51	41.30	5.0	45.90	56.10	1	73.5	20.4	0.102

THIS TABLE CONTINUES

NOTES

NOTE 1: ♦ ELECTRICAL CHARACTERISTICS ARE AT A JUNCTION TEMPERATURE (T_J) OF 25°C

NOTE 2: ♦ FOR BIPOLAR DEVICES WITH A V_{BR} OF 10 VOLTS OR LESS, THE I_R LIMIT IS DOUBLED

NOTE 3: ♦ SURGE CURRENT WAVEFORM SHOWN IN FIGURE 2A ON PAGE 3-14
♦ PEAK PULSE POWER DERATING SHOWN IN FIGURE 3A ON PAGE 3-14

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1.5KE SERIES 1500 WATT TRANSIENT SUPPRESSOR SPECIFICATIONS CONTINUED

TABLE 6A - 1.5KE SERIES 1500 WATT TRANSIENT SUPPRESSOR ELECTRICAL SPECIFICATIONS (NOTE 1)

JEDEC PART NUMBERS	SUSSEX PART NUMBERS 1500 WATT 1.5KE SERIES	STANDOFF VOLTAGE (V_{SO}) Volts	MAX. REVERSE LEAKAGE (I_R)@ V_{SO} (NOTE 2) µA	REVERSE BREAKDOWN VOLTAGE (V_{BR}) @ I_T		TEST CURRENT (I_T) mA	MAX. CLAMPING VOLTAGE (V_{CL}) @ PEAK PULSE CURRENT (I_{PP}) (NOTE 3)		MAX. TEMP. COEFFICIENT OF V_{BR} (%/°C)
				MIN. Volts	MAX. Volts		V_{CL} Volts	I_{PP} Amps	
1N6288A	1.5KE51A	43.60	5.0	48.50	53.60	1	70.1	21.4	0.102
1N6289	1.5KE56	45.60	5.0	50.40	61.80	1	80.5	18.6	0.103
1N6289A	1.5KE56A	47.80	5.0	53.20	58.80	1	77.0	19.5	0.103
1N6290	1.5KE62	50.20	5.0	55.80	68.20	1	89.0	16.9	0.104
1N6290A	1.5KE62A	53.00	5.0	58.90	65.10	1	85.0	17.7	0.104
1N6291	1.5KE68	55.10	5.0	61.20	74.80	1	96.0	15.3	0.104
1N6291A	1.5KE68A	58.10	5.0	64.60	71.40	1	92.0	16.3	0.104
1N6292	1.5KE75	60.70	5.0	67.50	82.50	1	108.0	13.9	0.105
1N6292A	1.5KE75A	64.10	5.0	71.30	78.80	1	103.0	14.6	0.105
1N6293	1.5KE82	66.40	5.0	73.80	90.20	1	118.0	12.7	0.105
1N6293A	1.5KE82A	70.10	5.0	77.90	86.10	1	113.0	13.3	0.105
1N6294	1.5KE91	73.70	5.0	81.90	100.00	1	131.0	11.4	0.106
1N6294A	1.5KE91A	77.80	5.0	86.50	95.50	1	125.0	12	0.106
1N6295	1.5KE100	81.00	5.0	90.00	110.00	1	144.0	10.4	0.106
1N6295A	1.5KE100A	85.50	5.0	95.00	105.00	1	137.0	11	0.106
1N6296	1.5KE110	89.20	5.0	99.00	121.00	1	158.0	9.5	0.107
1N6296A	1.5KE110A	94.00	5.0	106.00	116.00	1	152.0	9.9	0.107
1N6297	1.5KE120	97.20	5.0	108.00	132.00	1	173.0	8.7	0.107
1N6297A	1.5KE120A	102.00	5.0	114.00	126.00	1	165.0	9.1	0.107
1N6298	1.5KE130	106.00	5.0	117.00	143.00	1	187.0	8	0.107
1N6298A	1.5KE130A	111.00	5.0	124.00	137.00	1	179.0	8.4	0.107
1N6299	1.5KE150	121.00	5.0	136.00	165.00	1	215.0	7	0.108
1N6299A	1.5KE150A	128.00	5.0	143.00	158.00	1	207.0	7.2	0.108
1N6300	1.5KE160	130.00	5.0	144.00	176.00	1	230.0	6.5	0.108
1N6300A	1.5KE160A	136.00	5.0	152.00	168.00	1	219.0	6.8	0.108
1N6301	1.5KE170	138.00	5.0	153.00	187.00	1	244.0	6.2	0.108
1N6301A	1.5KE170A	145.00	5.0	162.00	179.00	1	234.0	6.4	0.108
1N6302	1.5KE180	146.00	5.0	162.00	198.00	1	256.0	5.8	0.108
1N6302A	1.5KE180A	154.00	5.0	171.00	189.00	1	246.0	6.1	0.108
1N6303A	1.5KE200	162.00	5.0	180.00	220.00	1	287.0	5.2	0.108
1N6303	1.5KE200A	171.00	5.0	190.00	210.00	1	274.0	5.5	0.108
N/A	1.5KE220	175.00	5.0	196.00	242.00	1	344.0	4.3	0.108
N/A	1.5KE220A	185.00	5.0	209.00	231.00	1	328.0	4.6	0.108
N/A	1.5KE250	202.00	5.0	225.00	275.00	1	360.0	5	0.110
N/A	1.5KE250A	214.00	5.0	237.00	263.00	1	344.0	5	0.110
N/A	1.5KE300	243.00	5.0	270.00	330.00	1	430.0	5	0.110
N/A	1.5KE300A	256.00	5.0	285.00	315.00	1	414.0	5	0.110
N/A	1.5KE350	284.00	5.0	315.00	385.00	1	504.0	4	0.110
N/A	1.5KE350A	300.00	5.0	333.00	368.00	1	482.0	4	0.110
N/A	1.5KE400	324.00	5.0	360.00	440.00	1	574.0	4	0.110
N/A	1.5KE400A	342.00	5.0	380.00	420.00	1	548.0	4	0.110
N/A	1.5KE440	356.00	5.0	396.00	484.00	1	598.0	4	0.110
N/A	1.5KE440A	376.00	5.0	418.00	462.00	1	590.0	4	0.110

NOTES

NOTE 1: ♦ELECTRICAL CHARACTERISTICS ARE AT A JUNCTION TEMPERATURE (T_J) OF 25°C

NOTE 2: ♦FOR BIPOLAR DEVICES WITH A V_{BR} OF 10 VOLTS OR LESS, THE I_R LIMIT IS DOUBLED

NOTE 3: ♦SURGE CURRENT WAVEFORM SHOWN IN FIGURE 2A ON PAGE 3-14
♦PEAK PULSE POWER DERATING SHOWN IN FIGURE 3A ON PAGE 3-14

FIGURE 1A - TYPICAL JUNCTION CAPACITANCE

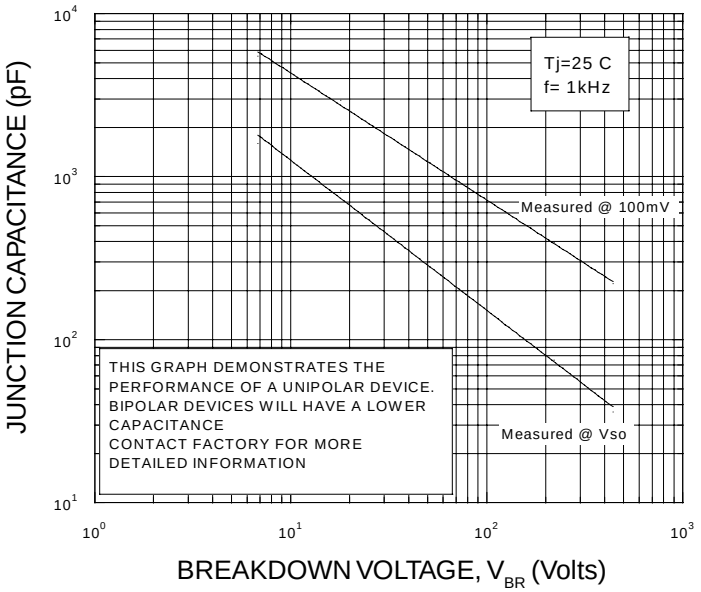

FIGURE 2A - PULSE WAVEFORM

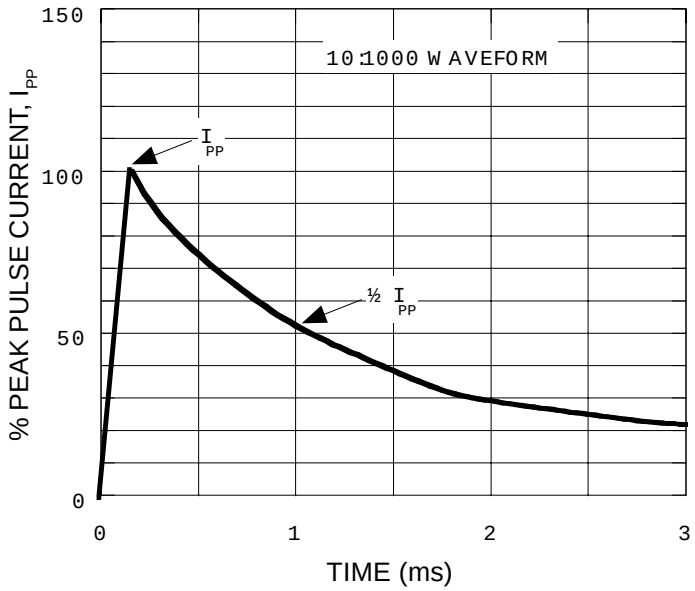

FIGURE 3A - PULSE DERATING CURVE