Micro Commercial Corp.
21201 Itasca St.
Chatsworth, CA 91311
Phone: (818) 701-4933
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1.5KE6.8 THRU 1.5KE400A

1500 Watt Transient Voltage Suppressors 6.8 to 400 Volts

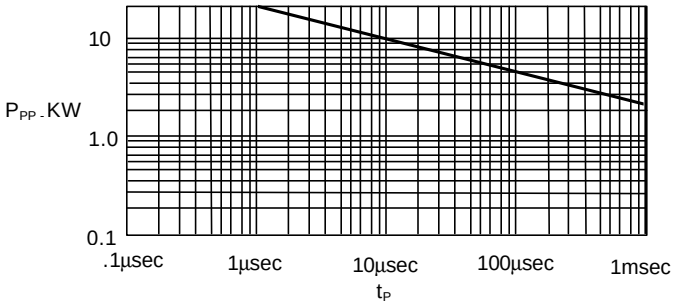
Features

- Unidirectional And Bidirectional
- Low Inductance
- High Temp Soldering: 250°C for 10 Seconds At Terminals
- For Bidirectional Devices Add “C” To The Suffix Of The Part Number: i.e. 1.5KE6.8C or 1.5KE6.8CA for 5% Tolerance Devices

Maximum Ratings

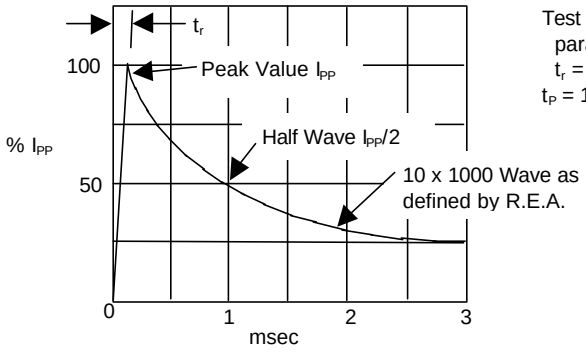
- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- 500 Watt Peak Power
- Response Time 1 x 10^{-12} Seconds For Unidirectional and 5 x 10^{-9} For Bidirectional

Figure 1



Peak Pulse Power (P_{PP}) – *versus* – Pulse Time (t_P)

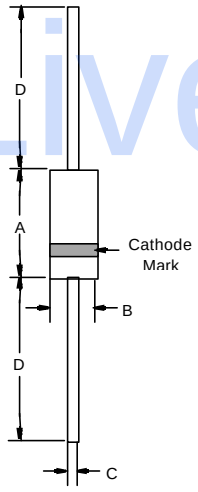
Figure 2 - Pulse Waveform



Test wave form parameters:
t_r = 10 µsec
t_P = 1000 µsec

Peak Pulse Current (% I_{PP}) - *Versus* - Time (t)

DO-201AD



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

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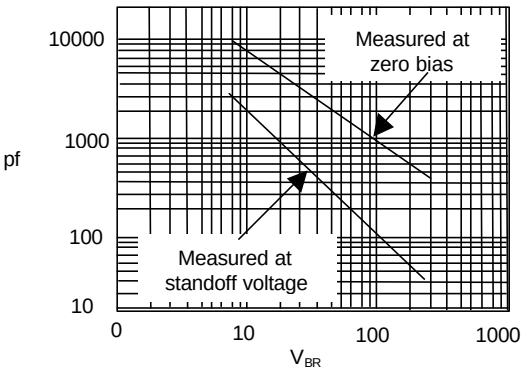
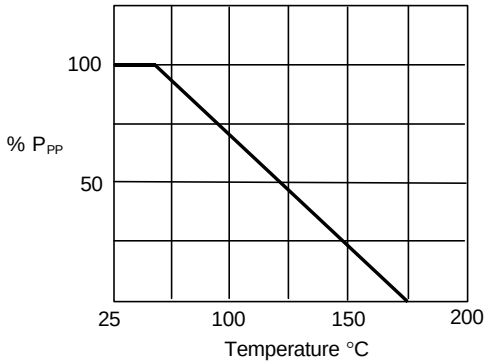
Figure 3 - Typical Capacitance



Typical Capacitance (pf) – *versus* – Breakdown voltage (V_{BR})

Figure 4 - Derating Curve



Peak Pulse Power (% P_{PP}) - *Versus* - Temperature °C

ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER	BREAKDOWN VOLTAGE $V_{(BR)}$ @ I_T (VOLTS)			TEST CURRENT I_T	RATED STANDOFF VOLTAGE V_{WM}	MAXIMUM REVERSE LEAKAGE I_D @V_{WM}	MAXIMUM CLAMPING VOLTAGE V_C @ I_{PP}	MAXIMUM PEAK PULSE CURRENT I_{PP}	MAX. TEMP COEFFICIENT OF V_{BR} $V_{(BR)}$ (TA) –55°C TO 100°C
	MIN	NOM	MAX	mADC	V	(µA)	V	A	% / °C
1.5KE6.8	6.12	6.8	7.48	10	5.50	1000	10.8	139	.057
1.5KE6.8A	6.45	6.8	7.14	10	5.80	1000	10.5	143	.057
1.5KE7.5	6.75	7.5	8.25	10	6.05	500	11.7	128	.061
1.5KE7.5A	7.13	7.5	7.88	10	6.40	500	11.3	132	.061
1.5KE8.2	7.38	8.2	9.02	10	6.63	200	12.5	120	.065
1.5KE8.2A	7.79	8.2	8.61	10	7.02	200	12.1	124	.065
1.5KE9.1	8.19	9.1	10.0	1	7.37	50	13.8	109	.068
1.5KE9.1A	8.65	9.1	9.55	1	7.78	50	13.4	112	.068
1.5KE10	9.00	10	11.0	1	8.10	10	15.0	100	.073
1.5KE10A	9.50	10	10.5	1	8.55	10	14.5	103	.073
1.5KE11	9.90	11	12.1	1	8.92	5	16.2	93	.075
1.5KE11A	10.5	11	11.6	1	9.40	5	15.6	96	.075
1.5KE12	10.8	12	13.2	1	9.72	5	17.3	87	.078
1.5KE12A	11.4	12	12.6	1	10.2	5	16.7	90	.078
1.5KE13	11.7	13	14.3	1	10.5	5	19.0	79	.081
1.5KE13A	12.4	13	13.7	1	11.1	5	18.2	82	.081
1.5KE15	13.5	15	16.5	1	12.1	5	22.0	68	.084
1.5KE15A	14.3	15	15.8	1	12.8	5	21.2	71	.084
1.5KE16	14.4	16	17.6	1	12.9	5	23.5	64	.086
1.5KE16A	15.2	16	16.8	1	13.6	5	22.5	67	.086
1.5KE18	16.2	18	19.8	1	14.5	5	26.5	56.5	.088
1.5KE18A	17.1	18	18.0	1	15.3	5	25.2	59.5	.088
1.5KE20	18.0	20	22.0	1	16.2	5	29.1	51.5	.090
1.5KE20A	19.0	20	21.0	1	17.1	5	27.7	54.0	.090
1.5KE22	19.8	22	24.2	1	17.8	5	31.9	47.0	.092
1.5KE22A	20.9	22	23.1	1	18.8	5	30.6	49.0	.092
1.5KE24	21.6	24	26.4	1	19.4	5	34.7	43.0	.094
1.5KE24A	22.8	24	25.2	1	20.5	5	33.2	45.0	.094
1.5KE27	24.3	27	29.7	1	21.8	5	39.1	38.5	.096
1.5KE27A	25.7	27	28.4	1	23.1	5	37.5	40.0	.096
1.5KE30	27.0	30	33.0	1	24.3	5	43.5	34.5	.097
1.5KE30A	28.5	30	31.5	1	25.6	5	41.4	36.0	.097
1.5KE33	29.7	33	36.3	1	26.8	5	47.7	31.5	.098
1.5KE33A	31.4	33	34.7	1	28.2	5	45.7	33.0	.098
1.5KE36	32.4	36	39.6	1	29.1	5	52.0	29.0	.099

1.5KE6.8 THRU 1.5KE400A

ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER	BREAKDOWN VOLTAGE $V_{(BR)}$ @ I_T (VOLTS)			TEST CURRENT I_T	RATED STANDOFF VOLTAGE V_{WM}	MAXIMUM REVERSE LEAKAGE I_D @V_{WM}	MAXIMUM CLAMPING VOLTAGE V_C @ I_{PP}	MAXIMUM PEAK PULSE CURRENT I_{PP}	MAX. TEMP COEFFICIENT OF V_{BR} $V_{(BR)}$ (TA) –55°C TO 100°C
	MIN	NOM	MAX	mADC	V	(µA)	V	A	% / °C
1.5KE39	35.1	39	42.9	1	31.6	5	56.4	26.5	.100
1.5KE39A	37.1	39	41.0	1	33.3	5	53.9	28.0	.100
1.5KE43	38.7	43	47.3	1	34.8	5	61.9	24.0	.101
1.5KE43A	40.9	43	45.2	1	36.8	5	59.3	25.3	.101
1.5KE47	42.3	47	51.7	1	38.1	5	67.8	22.2	.101
1.5KE47A	44.7	47	49.4	1	40.2	5	64.8	23.2	.101
1.5KE51	45.9	51	56.1	1	41.3	5	73.5	20.4	.102
1.5KE51A	48.5	51	53.6	1	43.6	5	70.1	21.4	.102
1.5KE56	50.4	56	61.6	1	45.4	5	80.5	18.6	.103
1.5KE56A	53.2	56	58.8	1	47.8	5	77.0	19.5	.103
1.5KE62	55.8	62	68.2	1	50.2	5	89.0	16.9	.104
1.5KE62A	58.9	62	65.1	1	53.0	5	85.0	17.7	.104
1.5KE68	61.2	68	74.8	1	55.1	5	98.0	15.3	.104
1.5KE68A	64.6	68	71.4	1	58.1	5	92.0	16.3	.104
1.5KE75	67.5	75	82.5	1	60.7	5	108	13.9	.105
1.5KE75A	71.3	75	78.8	1	64.1	5	103	14.6	.105
1.5KE82	73.8	82	90.2	1	66.4	5	118	12.7	.105
1.5KE82A	77.9	82	86.1	1	70.1	5	113	13.3	.105
1.5KE91	81.9	91	100	1	73.7	5	131	11.4	.106
1.5KE91A	86.5	91	95.5	1	77.8	5	125	12.0	.106
1.5KE100	90.0	100	110	1	81.0	5	144	10.4	.106
1.5KE100A	95.0	100	105	1	85.5	5	137	11.0	.106
1.5KE110	99.0	110	121	1	89.2	5	158	9.5	.107
1.5KE110A	105	110	116	1	94.0	5	152	9.9	.107
1.5KE120	108	120	132	1	97.2	5	173	8.7	.107
1.5KE120A	114	120	126	1	102	5	165	9.1	.107
1.5KE130	117	130	143	1	105	5	187	8.0	.107
1.5KE130A	124	130	137	1	111	5	179	8.4	.107
1.5KE150	135	150	165	1	121	5	215	7.0	.108
1.5KE150A	143	150	158	1	128	5	207	7.2	.108
1.5KE160	144	160	176	1	130	5	230	6.5	.108
1.5KE160A	152	160	168	1	136	5	219	6.8	.108
1.5KE170	153	170	187	1	138	5	244	6.2	.108
1.5KE170A	162	170	179	1	145	5	234	6.4	.108
1.5KE180	162	180	198	1	146	5	258	5.8	.108
1.5KE180A	171	180	189	1	154	5	246	6.1	.108
1.5KE200	180	200	220	1	162	5	287	5.2	.108
1.5KE200A	190	200	210	1	171	5	274	5.5	.108
1.5KE220	198	220	242	1	175	5	344	4.3	.110
1.5KE220A	209	220	231	1	185	5	328	4.6	.110
1.5KE250	225	250	275	1	202	5	360	5.0	.110
1.5KE250A	237	250	263	1	214	5	344	5.0	.110
1.5KE300	270	300	330	1	243	5	430	5.0	.110
1.5KE300A	285	300	315	1	256	5	414	5.0	.110
1.5KE350	315	350	385	1	284	5	504	4.0	.110
1.5KE350A	333	350	368	1	300	5	482	4.0	.110
1.5KE400	360	400	440	1	324	5	574	4.0	.110
1.5KE400A	380	400	420	1	342	5	548	4.0	.110