

**1.5KE6.8(C)-LF
THRU
1.5KE540(C)A-LF**

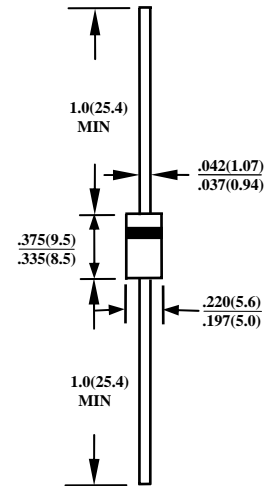
1500W TRANSIENT VOLTAGE SUPPRESSOR

FEATURES

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- 1500W SURGE CAPABILITY AT 1ms
- EXCELLENT CLAMPING CAPABILITY
- LOW ZENER IMPEDANCE
- FAST RESPONSE TIME: TYPICALLY LESS THAN 1.0 PS FROM 0 VOLTS TO BV MIN
- TYPICAL IR LESS THAN 1μA ABOVE 10V
- HIGH TEMPERATURE SOLDERING GUARANTEED: 260°C/10S / .375" (9.5mm) LEAD LENGTH/5LBS., (2.3KG) TENSION
- LEAD FREE

MECHANICAL DATA

- CASE : MOLDED PLASTIC
- TERMINALS : AXIAL LEADS, SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY : COLOR BAND DENOTED CATHODE EXCEPT BIPOLAR
- WEIGHT : 1.2 GRAMS



CASE : DO-201AE
DIMENSIONS IN INCHES AND (MILLIMETERS)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED**

RATINGS	SYMBOL	VALUE	UNITS
PEAK POWER DISSIPATION AT TA=25°C, TP=1ms(NOTE1)	P _{PK}	MINIMUM 1500	WATTS
PEAK PULSE CURRENT WITH A 10/1000us WAVEFORM(NOTE 1)	I _{PPM}	SEE NEXT TABLE	A
STEADY STATE POWER DISSIPATION AT T _L =75°C, LEAD LENGTHS 0.375" (9.5mm) (NOTE2)	P _{M(AV)}	6.5	WATTS
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD (JEDEC METHOD) (NOTE 3)	I _{FSM}	200	Amps
TYPICAL THERMAL RESISTANCE JUNCTION-TO-AMBIENT	R _{θJA}	75	°C/W
OPERATING AND STORAGE TEMPERATURE RANGE	T _J , T _{STG}	- 55 TO + 175	°C

- NOTE :
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

JEDEC TYPE NUMBER	GENERAL PART NUMBER	BREAKDOWN V _{BR} (VOLTS)		@IT (mA)	WORKING PEAK REVERSE VOLTAGE V _{RWM} (VOLTS)	MAXIMUM REVERSE LEAKAGE AT V _{RWM} IR(μA)	MAXIMUM REVERSE SURGE CURRENT I _{RSM} (AMPS)	MAX CLAMPING VOLTAGE V _{RWM} (VOLTS)	MAXIMUM TEMPERATURE COEFFICIENT OF V _{BR} (%C) V _{RSM} (VOLTS)
		MIN	MAX						
1N6267	1.5KE6.8(C)-LF	6.12	7.48	10	5.50	1000	139	10.8	0.057
1N6267A	1.5KE6.8(C)A-LF	6.45	7.14	10	5.80	1000	143	10.5	0.057
1N6268	1.5KE7.5(C)-LF	6.75	8.25	10	6.05	500	128	11.7	0.061
1N6268A	1.5KE7.5(C)A-LF	7.13	7.88	10	6.40	500	132	11.3	0.061
1N6269	1.5KE8.2(C)-LF	7.38	9.02	10	6.63	200	120	12.5	0.065
1N6269A	1.5KE8.2(C)A-LF	7.79	8.61	10	7.02	200	124	12.1	0.065
1N6270	1.5KE9.1(C)-LF	8.19	10.0	1.0	7.37	50	109	13.8	0.068
1N6270A	1.5KE9.1(C)A-LF	8.65	9.55	1.0	7.78	50	112	13.4	0.068
1N6271	1.5KE10(C)-LF	9.00	11.0	1.0	8.10	10	100	15.0	0.073
1N6271A	1.5KE10(C)A-LF	9.50	10.5	1.0	8.55	10	103	14.5	0.073
1N6272	1.5KE11(C)-LF	9.90	12.1	1.0	8.92	5.0	93.0	16.2	0.075
1N6272A	1.5KE11(C)A-LF	10.5	11.6	1.0	9.40	5.0	96.0	15.6	0.075
1N6273	1.5KE12(C)-LF	10.8	13.2	1.0	9.72	5.0	87.0	17.3	0.078
1N6273A	1.5KE12(C)A-LF	11.4	12.6	1.0	10.2	5.0	90.0	16.7	0.078
1N6274	1.5KE13(C)-LF	11.7	14.3	1.0	10.5	5.0	79.0	19.0	0.081
1N6274A	1.5KE13(C)A-LF	12.4	13.7	1.0	11.1	5.0	82.0	18.2	0.081
1N6275	1.5KE15(C)-LF	13.5	16.5	1.0	12.1	5.0	68.0	22.0	0.084
1N6275A	1.5KE15(C)A-LF	14.3	15.8	1.0	12.8	5.0	71.0	21.2	0.084
1N6276	1.5KE16(C)-LF	14.4	17.6	1.0	12.9	5.0	64.0	23.5	0.086
1N6276A	1.5KE16(C)A-LF	15.2	16.8	1.0	13.6	5.0	67.0	22.5	0.086
1N6277	1.5KE18(C)-LF	16.2	19.8	1.0	14.5	5.0	56.5	26.5	0.088
1N6277A	1.5KE18(C)A-LF	17.1	18.9	1.0	15.3	5.0	59.5	25.2	0.088
1N6278	1.5KE20(C)-LF	18.0	22.0	1.0	16.2	5.0	51.5	29.1	0.090
1N6278A	1.5KE20(C)A-LF	19.0	21.0	1.0	17.1	5.0	54.0	27.7	0.090
1N6279	1.5KE22(C)-LF	19.8	24.2	1.0	17.8	5.0	47.0	31.9	0.092
1N6279A	1.5KE22(C)A-LF	20.9	23.1	1.0	18.8	5.0	49.0	30.6	0.092
1N6280	1.5KE24(C)-LF	21.6	26.4	1.0	19.4	5.0	43.0	34.7	0.094
1N6280A	1.5KE24(C)A-LF	22.8	25.2	1.0	20.5	5.0	45.0	33.2	0.094
1N6281	1.5KE27(C)-LF	24.3	29.7	1.0	21.8	5.0	38.5	39.1	0.096
1N6281A	1.5KE27(C)A-LF	25.7	28.4	1.0	23.1	5.0	40.0	37.5	0.096
1N6282	1.5KE30(C)-LF	27.0	33.0	1.0	24.3	5.0	34.5	43.5	0.097
1N6282A	1.5KE30(C)A-LF	28.5	31.5	1.0	25.6	5.0	36.0	41.4	0.097
1N6283	1.5KE33(C)-LF	29.7	36.3	1.0	26.8	5.0	31.5	47.7	0.098
1N6283A	1.5KE33(C)A-LF	31.4	34.7	1.0	28.2	5.0	33.0	45.7	0.098
1N6284	1.5KE36(C)-LF	32.4	39.6	1.0	29.1	5.0	29.0	52.0	0.099
1N6284A	1.5KE36(C)A-LF	34.2	37.8	1.0	30.8	5.0	30.0	49.9	0.099
1N6285	1.5KE39(C)-LF	35.1	42.9	1.0	31.6	5.0	26.5	56.4	0.100
1N6285A	1.5KE39(C)A-LF	37.1	41.0	1.0	33.3	5.0	28.0	53.9	0.100
1N6286	1.5KE43(C)-LF	38.7	47.3	1.0	34.8	5.0	24.0	61.9	0.101
1N6286A	1.5KE43(C)A-LF	40.9	45.2	1.0	36.8	5.0	25.3	59.3	0.101
1N6287	1.5KE47(C)-LF	42.3	51.7	1.0	36.1	5.0	22.2	67.8	0.101
1N6287A	1.5KE47(C)A-LF	44.7	49.4	1.0	40.2	5.0	23.2	64.8	0.101
1N6288	1.5KE51(C)-LF	45.9	56.1	1.0	41.3	5.0	20.4	73.5	0.102
1N6288A	1.5KE51(C)A-LF	48.5	53.6	1.0	43.6	5.0	21.4	70.1	0.102
1N6289	1.5KE56(C)-LF	50.4	61.8	1.0	45.4	5.0	18.6	80.5	0.103
1N6289A	1.5KE56(C)A-LF	53.2	58.8	1.0	47.8	5.0	19.5	77.0	0.103
1N6290	1.5KE62(C)-LF	55.8	68.2	1.0	50.2	5.0	16.9	89.0	0.104
1N6290A	1.5KE62(C)A-LF	58.9	65.1	1.0	53.0	5.0	17.7	85.0	0.104
1N6291	1.5KE68(C)-LF	61.2	74.8	1.0	55.1	5.0	15.3	98.0	0.104
1N6291A	1.5KE68(C)A-LF	64.6	71.4	1.0	58.1	5.0	16.3	92.0	0.104
1N6292	1.5KE75(C)-LF	67.5	82.5	1.0	60.7	5.0	13.9	108.0	0.105
1N6292A	1.5KE75(C)A-LF	71.3	78.8	1.0	64.1	5.0	14.6	103.0	0.105
1N6293	1.5KE82(C)-LF	73.8	90.2	1.0	66.4	5.0	12.7	118.0	0.105
1N6293A	1.5KE82(C)A-LF	77.9	86.1	1.0	70.1	5.0	13.3	113.0	0.105

DEVICE	GENERAL PART NUMBER	BREAKDOWN V _{BR} (VOLTS)		@IT (mA)	WORKING PEAK REVERSE VOLTAGE V _{RWM} (VOLTS)	MAXIMUM REVERSE LEAKAGE AT V _{RWM} IR(μA)	MAXIMUM REVERSE CURRENT I _{RSM} (AMPS)	MAX CLAMPING VOLTAGE V _{RWM} (VOLTS)	MAXIMUM TEMPERATURE COEFFICIENT OF V _{BR} (%C) V _{RSM} (VOLTS)
		MIN	MAX						
1N6294	1.5KE91(C)-LF	81.9	100.0	1.0	73.7	5.0	11.4	131.8	0.106
1N6294A	1.5KE91(C)A-LF	86.5	95.50	1.0	77.8	5.0	12.0	125.0	0.106
1N6295	1.5KE100(C)-LF	90.0	110.0	1.0	81.0	5.0	10.4	144.0	0.106
1N6295A	1.5KE100(C)A-LF	95.0	105.0	1.0	85.5	5.0	11.0	137.0	0.106
1N6296	1.5KE110(C)-LF	99.0	121.0	1.0	89.2	5.0	9.5	158.0	0.107
1N6296A	1.5KE110(C)A-LF	106.0	116.0	1.0	94.0	5.0	9.9	152.0	0.107
1N6297	1.5KE120(C)-LF	108.0	132.0	1.0	97.2	5.0	8.7	173.0	0.107
1N6297A	1.5KE120(C)A-LF	114.0	126.0	1.0	102.0	5.0	9.1	165.0	0.107
1N6298	1.5KE130(C)-LF	117.0	143.0	1.0	106.0	5.0	8.0	187.0	0.107
1N6298A	1.5KE130(C)A-LF	124.0	137.0	1.0	111.0	5.0	8.4	179.0	0.107
1N6299	1.5KE150(C)-LF	136.0	165.0	1.0	121.0	5.0	7.0	215.0	0.108
1N6299A	1.5KE150(C)A-LF	143.0	158.0	1.0	128.0	5.0	7.2	207.0	0.108
1N6300	1.5KE160(C)-LF	144.0	176.0	1.0	130.0	5.0	6.5	230.0	0.108
1N6300A	1.5KE160(C)A-LF	152.0	168.0	1.0	136.0	5.0	6.8	219.0	0.108
1N6301	1.5KE170(C)-LF	153.0	187.0	1.0	138.0	5.0	6.2	244.0	0.108
1N6301A	1.5KE170(C)A-LF	162.0	179.0	1.0	145.0	5.0	6.4	234.0	0.108
1N6302	1.5KE180(C)-LF	162.0	198.0	1.0	146.0	5.0	5.8	258.0	0.108
1N6302A	1.5KE180(C)A-LF	171.0	189.0	1.0	154.0	5.0	6.1	246.0	0.108
1N6303	1.5KE200(C)-LF	180.0	220.0	1.0	162.0	5.0	5.2	287.0	0.108
1N6303A	1.5KE200(C)A-LF	190.0	210.0	1.0	171.0	5.0	5.5	274.0	0.108
	1.5KE220(C)-LF	196.0	242.0	1.0	175.0	5.0	4.4	344.0	0.108
	1.5KE220(C)A-LF	209.0	231.0	1.0	185.0	5.0	4.6	328.0	0.108
	1.5KE250(C)-LF	225.0	275.0	1.0	202.0	5.0	4.2	360.0	0.110
	1.5KE250(C)A-LF	237.0	263.0	1.0	214.0	5.0	4.4	344.0	0.110
	1.5KE300(C)-LF	270.0	330.0	1.0	243.0	5.0	3.5	430.0	0.110
	1.5KE300(C)A-LF	285.0	315.0	1.0	256.0	5.0	3.6	414.0	0.110
	1.5KE350(C)-LF	315.0	385.0	1.0	284.0	5.0	3.0	504.0	0.110
	1.5KE350(C)A-LF	333.0	368.0	1.0	300.0	5.0	3.1	482.0	0.110
	1.5KE400(C)-LF	360.0	440.0	1.0	324.0	5.0	2.6	574.0	0.110
	1.5KE400(C)A-LF	380.0	420.0	1.0	342.0	5.0	2.7	548.0	0.110
	1.5KE440(C)-LF	396.0	484.0	1.0	356.0	5.0	2.4	631.0	0.110
	1.5KE440(C)A-LF	418.0	462.0	1.0	376.0	5.0	2.5	602.0	0.110
	1.5KE480(C)-LF	432.0	528.0	1.0	389.0	5.0	2.19	686.0	0.110
	1.5KE480(C)A-LF	456.0	504.0	1.0	408.0	5.0	2.28	658.0	0.110
	1.5KE510(C)-LF	459.0	561.0	1.0	413.0	5.0	2.06	729.0	0.110
	1.5KE510(C)A-LF	485.0	535.0	1.0	434.0	5.0	2.15	698.0	0.110
	1.5KE540(C)-LF	486.0	594.0	1.0	437.0	5.0	1.94	772.0	0.110
	1.5KE540(C)A-LF	513.0	567.0	1.0	459.0	5.0	2.03	740.0	0.110

- NOTES :
1. V_{BR} MEASURED AFTER I_T APPLIED FOR 300 μS, I_T=SQUARE WAVE PULSE OR EQUIVALENT
 2. SURGE CURRENT WAVEFORM PER FIGURE 3 AND DERATED PER FIGURE 2.
 3. V_F=3.5V MAX, I_F=100A (1.5KE6.8(C) THRU 1.5KE200(C)A)
V_F=6.5V MAX, I_F=100A (1.5KE220(C) THRU 1.5KE540(C)A) PER 1/2 SQUARE OR EQUIVALENT SINE WAVE.
PW=8.3ms, DUTY CYCLE=4 PULSES PER MINUTE MXIMUM
 4. FOR BIPOLAR TYPES HAVING V_{RWM} OF 10 VOLTS AND UNDER, THE I_R LIMIT IS DOUBLED

RATINGS AND CHARACTERISTIC CURVES 1.5KE6.8(C)-LF THRU 1.5KE540(C)A-LF

FIG. 1 - PEAK PULSE POWER RATING CURVE

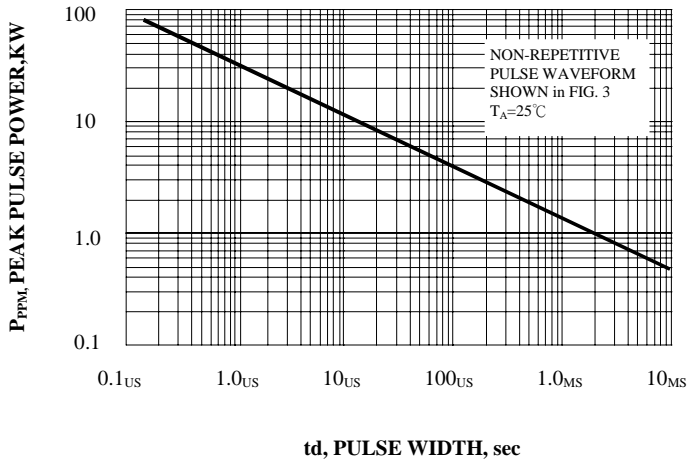


FIG. 2 - PULSE DERATING CURVE

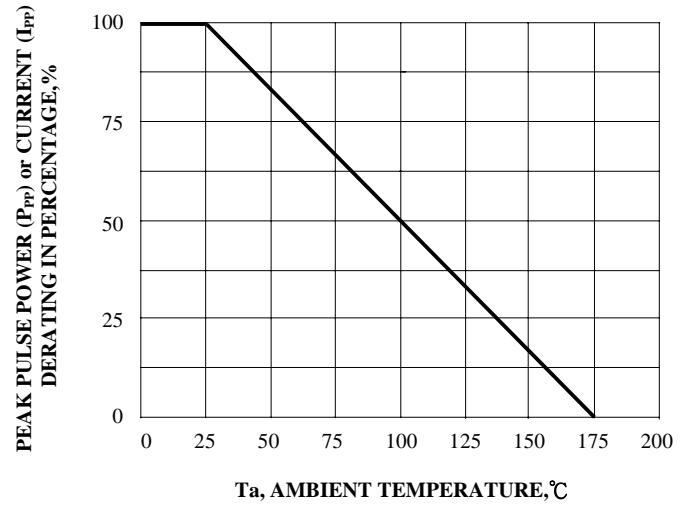


FIG. 3 - PULSE WAVEFORM

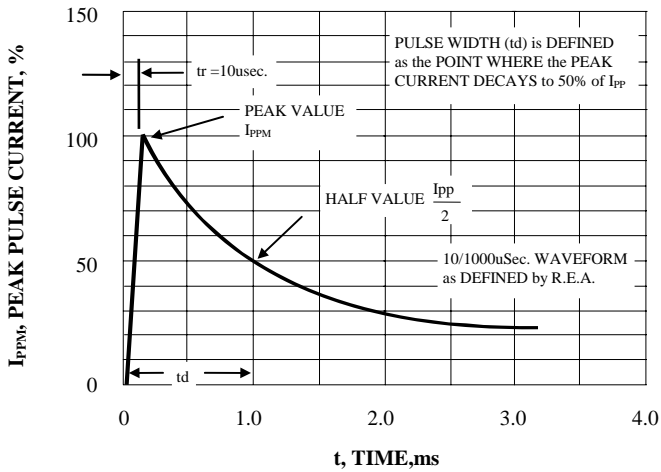


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

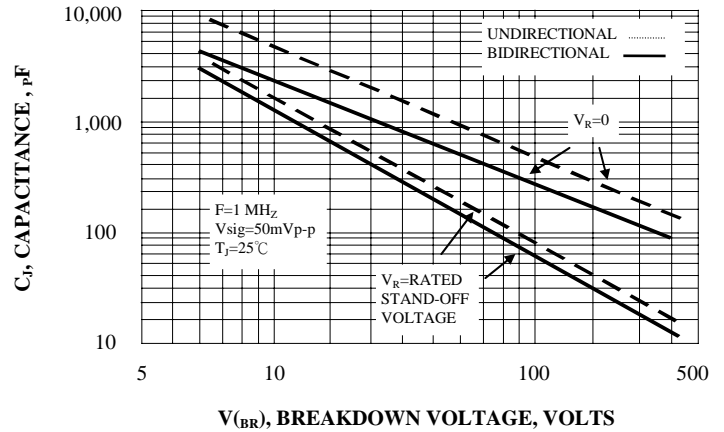


FIG. 5 - STEADY STATE POWER DERATING CURVE

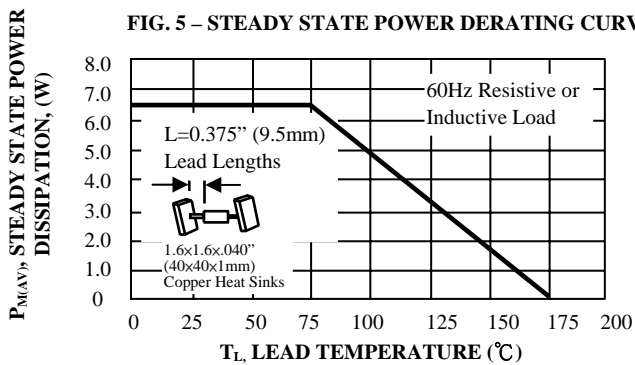
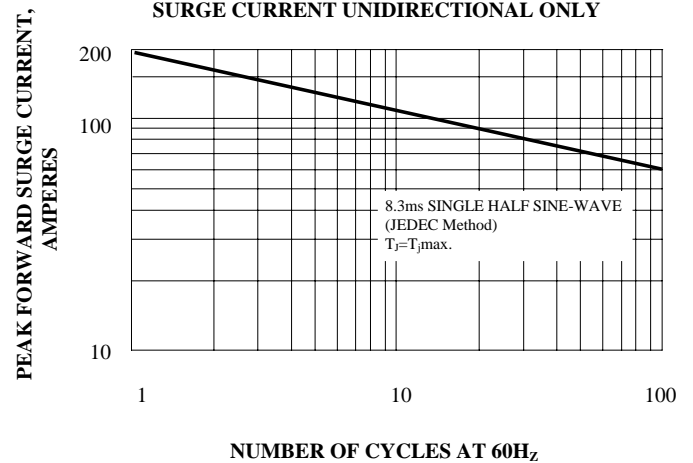


FIG. 6 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL ONLY



RATINGS AND CHARACTERISTIC CURVES 1.5KE6.8(C)-LF THRU 1.5KE540(C)A-LF

FIG. 7 - INCREMENTAL CLAMPING VOLTAGE CURVE UNIDIRECTIONAL

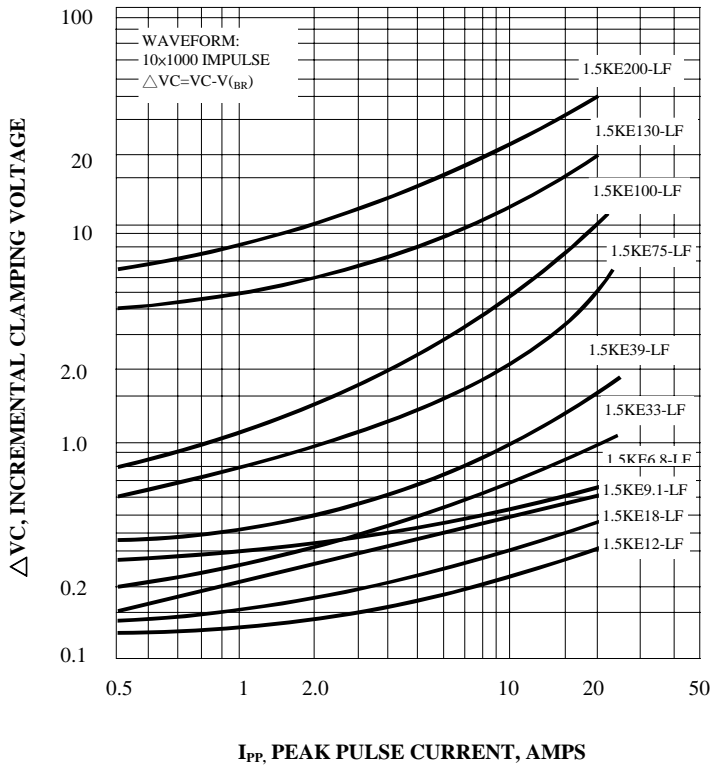


FIG. 8 - INCREMENTAL CLAMPING VOLTAGE CURVE UNIDIRECTIONAL

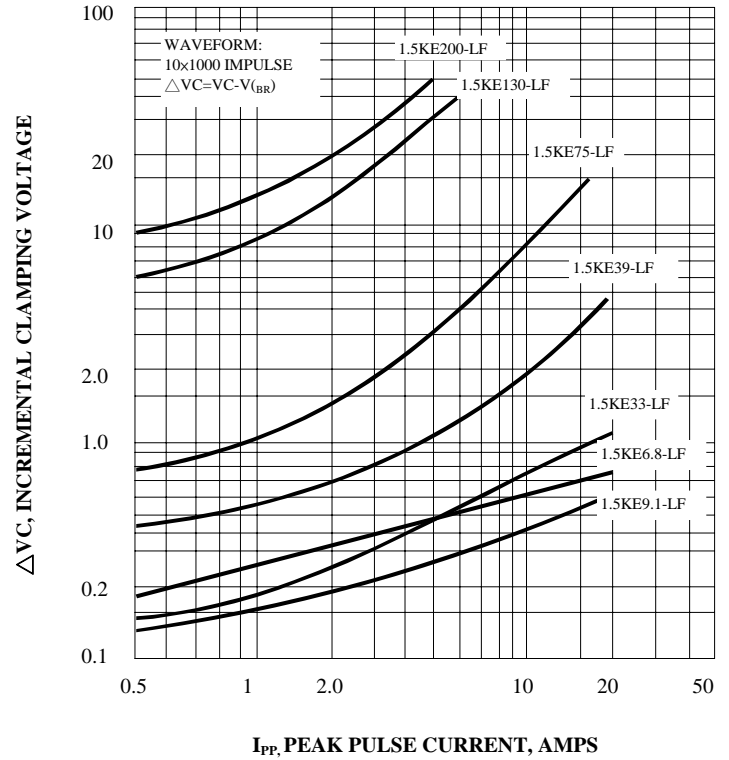


FIG. 9 - INCREMENTAL CLAMPING VOLTAGE CURVE BIDIRECTIONAL

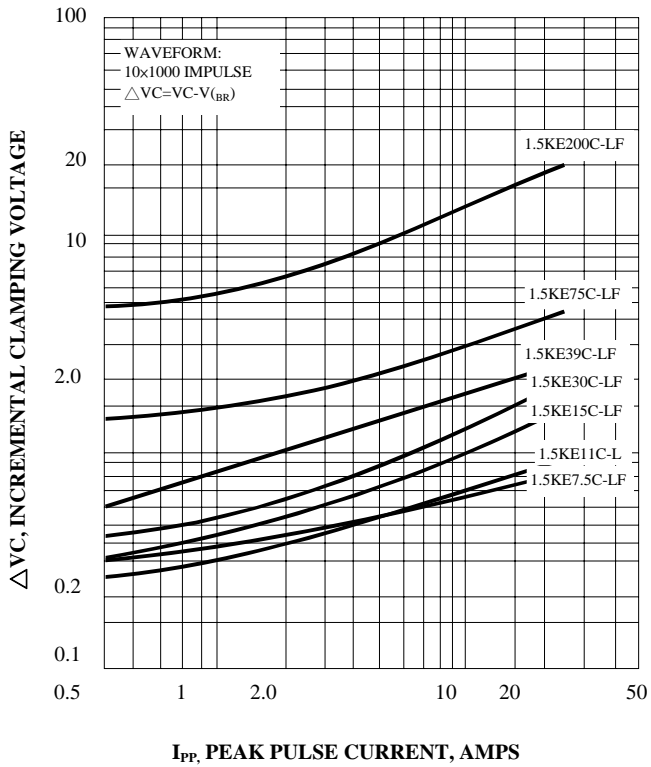
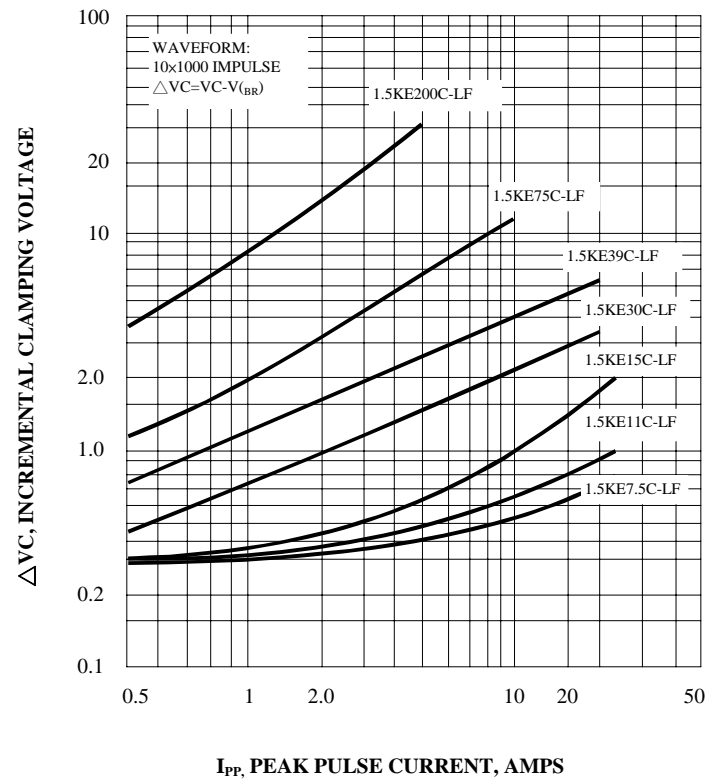


FIG. 10 - INCREMENTAL CLAMPING VOLTAGE CURVE BIDIRECTIONAL



RATINGS AND CHARACTERISTIC CURVES 1.5KE6.8(C)-LF THRU 1.5KE540(C)A-LF

FIG. 11 - INSTANTANEOUS FORWARD VOLTAGE CHARACTERISTICS CURVE

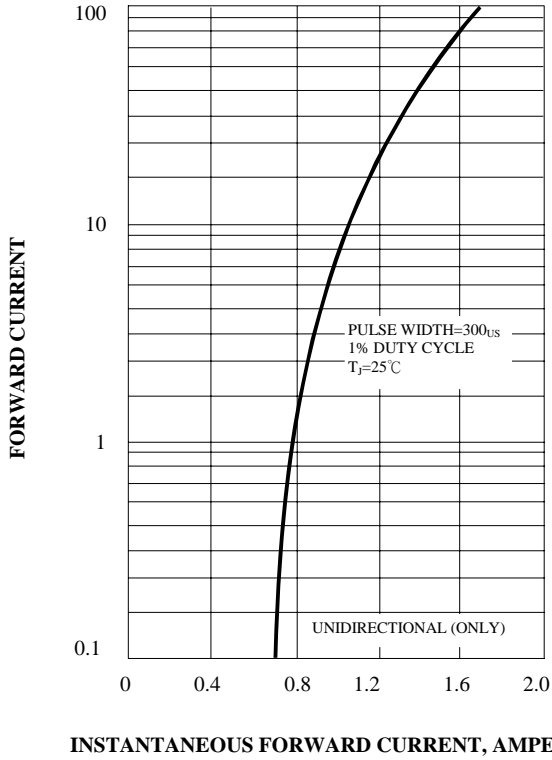


FIG. 12 - BREAKDOWN VOLTAGE TEMPERATURE COEFFICIENT CURVE

