

A suffix of "-C" specifies halogen & RoHS compliant

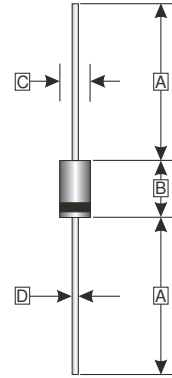
## FEATURES

- 1500 Watts Surge Capability at 1ms.
- Excellent clamping capability.
- Low zener impedance.
- Fast response time : Typically less than 1.0ps from 0 volt to BV min.
- Typical IR less than 1 A above 10 V
- High temperature soldering guaranteed : 260°C / 10 seconds / .375" (9.5mm) lead length, 5lbs.(2.3kg) tension.

## MECHANICAL DATA

- Case: DO-27
- Epoxy : UL 94V-0 rate flame retardant.
- Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed.
- Polarity : Color band denotes cathode end
- Mounting position : Any

### DO - 27



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.50
C	4.80	5.60
D	0.96	1.32

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Maximum Ratings @ T<sub>A</sub> = 25°C)

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Peak Power Disipation at TA=25°C, TP=1ms <sup>1</sup>	P <sub>PK</sub>	Minimum 1500	W
Steady State Power Dissipation at T <sub>L</sub> =75°C Lead Length .375" (9.5mm) <sup>2</sup>	P <sub>D</sub>	6.5	W
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave superimposed on rated load (JEDEC method) <sup>3</sup>	I <sub>FSM</sub>	200	A
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 ~ 150	°C

Notes:

1. Non-repetitive current pulse per Fig. 3 and derated above TA=25°C per Fig. 2.
2. Mounted on Copper Pad area of 0.8" X 0.8" (20mm X 20mm) per Fig. 5.
3. 8.3ms single half sine-wave, duty cycle = 4 pulses per minute maximum.

**TYPICAL CHARACTERISTICS**

FIG.1-PEAK PULSE POWER DERATING CURVE

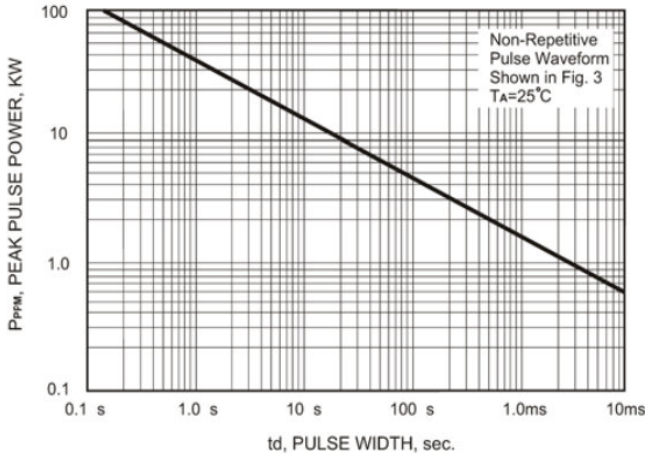


FIG.2-PULSE DERATING CURVE

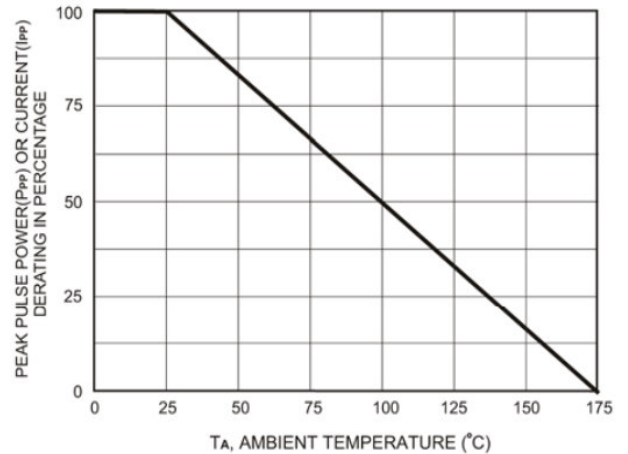


FIG.3-PULSE WAVE FORM

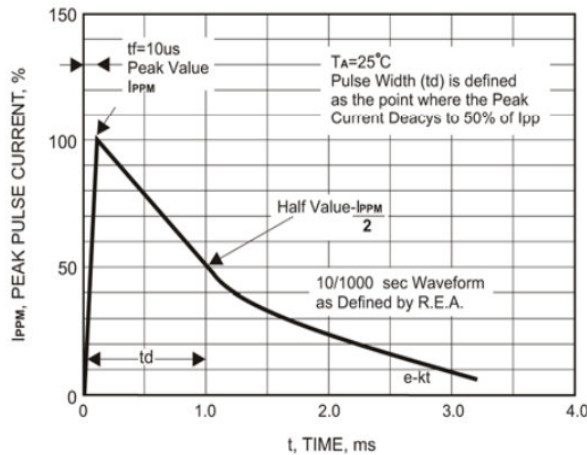


FIG.4-TYPICAL JUNCTION CAPACITANCE

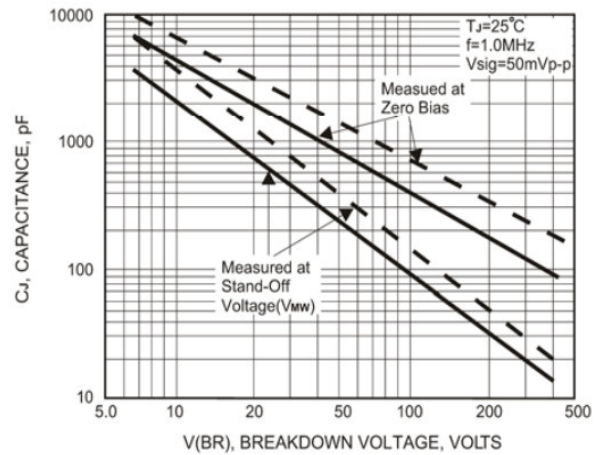


FIG.5-STEADY STATE POWER DERATING CURVE

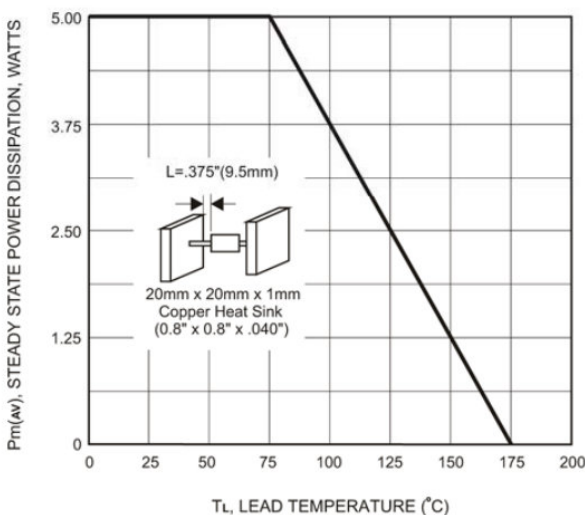
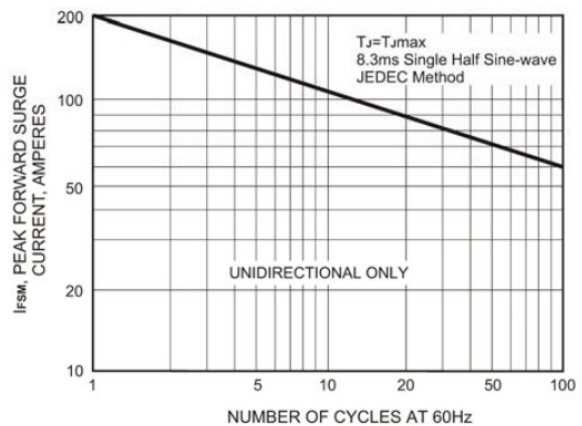


FIG.6-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT, UNIDIRECTIONAL



**ELECTRICAL CHARACTERISTIC** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

PART NUMBER		REVERSE STANDOFF VOLTAGE	BREAKDOWN VOLTAGE MIN@ $I_T$	BREAKDOWN VOLTAGE MAX@ $I_T$	TEST CURRENT	MAX CLAMPING VOLTAGE $V_C@I_{PP}$	PEAK PULSE CURRENT	REVERSE LEAKAGE $I_R@V_{RRM}$
DIRECTIONAL		$V_{RRM}$	$V_{BR}$	$V_{BR}$	$I_T$	$V_C$	$I_{PP}$	$I_R$
UNI	BI	V	V	V	mA	V	A	$\mu\text{A}$
1.5KE6.8A	1.5KE6.8CA	5.80	6.45	7.14	10	10.5	144.8	1000
1.5KE7.5A	1.5KE7.5CA	6.40	7.13	7.88	10	11.3	134.5	500
1.5KE8.2A	1.5KE8.2CA	7.02	7.79	8.61	10	12.1	125.6	200
1.5KE9.1A	1.5KE9.1CA	7.78	8.65	9.5	1	13.4	113.4	50
1.5KE10A	1.5KE10CA	8.55	9.5	10.5	1	14.5	104.8	10
1.5KE11A	1.5KE11CA	9.40	10.5	11.6	1	15.6	97.4	5
1.5KE12A	1.5KE12CA	10.20	11.4	12.6	1	16.7	91	5
1.5KE13A	1.5KE13CA	11.10	12.4	13.7	1	18.2	83.5	5
1.5KE15A	1.5KE15CA	12.80	14.3	15.8	1	21.2	71.7	5
1.5KE16A	1.5KE16CA	13.60	15.2	16.8	1	22.5	67.6	5
1.5KE18A	1.5KE18CA	15.30	17.1	18.9	1	25.2	60.3	5
1.5KE20A	1.5KE20CA	17.10	19	21	1	27.7	54.9	5
1.5KE22A	1.5KE22CA	18.80	20.9	23.1	1	30.6	49.7	5
1.5KE24A	1.5KE24CA	20.50	22.8	25.2	1	33.2	45.8	5
1.5KE27A	1.5KE27CA	23.10	25.7	28.4	1	37.5	40.5	5
1.5KE30A	1.5KE30CA	25.60	28.5	31.5	1	41.4	36.7	5
1.5KE33A	1.5KE33CA	28.20	31.4	34.7	1	45.7	33.3	5
1.5KE36A	1.5KE36CA	30.80	34.2	37.8	1	49.9	30.5	5
1.5KE39A	1.5KE39CA	33.30	37.1	41	1	53.9	28.2	5
1.5KE43A	1.5KE43CA	36.80	40.9	45.2	1	59.3	25.6	5
1.5KE47A	1.5KE47CA	40.20	44.7	49.4	1	64.8	23.5	5
1.5KE51A	1.5KE51CA	43.60	48.5	53.6	1	70.1	21.7	5
1.5KE56A	1.5KE56CA	47.80	53.2	58.8	1	77	19.7	5
1.5KE62A	1.5KE62CA	53.00	58.9	65.1	1	85	17.9	5
1.5KE68A	1.5KE68CA	58.10	64.6	71.4	1	92	16.5	5
1.5KE75A	1.5KE75CA	64.10	71.3	78.8	1	103	14.8	5
1.5KE82A	1.5KE82CA	70.10	77.9	86.1	1	113	13.5	5
1.5KE91A	1.5KE91CA	77.80	86.5	95.5	1	125	12.2	5
1.5KE100A	1.5KE100CA	85.50	95	105	1	137	11.1	5
1.5KE110A	1.5KE110CA	94	105	116	1	152	10	5
1.5KE120A	1.5KE120CA	102	114	126	1	165	9.2	5
1.5KE130A	1.5KE130CA	111	124	137	1	179	8.5	5
1.5KE150A	1.5KE150CA	128	143	158	1	207	7.3	5
1.5KE160A	1.5KE160CA	136	152	168	1	219	6.9	5
1.5KE170A	1.5KE170CA	145	162	179	1	234	6.5	5
1.5KE180A	1.5KE180CA	154	171	189	1	246	6.2	5
1.5KE200A	1.5KE200CA	171	190	210	1	274	5.5	5
1.5KE220A	1.5KE220CA	185	209	231	1	328	4.6	5
1.5KE250A	1.5KE250CA	214	237	263	1	344	4.4	5
1.5KE300A	1.5KE300CA	256	285	315	1	414	3.7	5
1.5KE350A	1.5KE350CA	300	332	368	1	482	3.2	5
1.5KE400A	1.5KE400CA	342	380	420	1	552	2.72	5
1.5KE440A	1.5KE440CA	376	418	462	1	600	2.47	5
1.5KE550A	1.5KE550CA	470.3	522.5	577.5	1	759	1.98	5

Notes:

- Suffix "A" denotes 5% tolerance device.
- For bi-Directional devices having VR of 10volt and under, the IR limit is double
- For Bidirectional use C or CA Suffix for types 1.5KE6.8 thru 1.5KE550.
- Electrical characteristics apply in both directions.