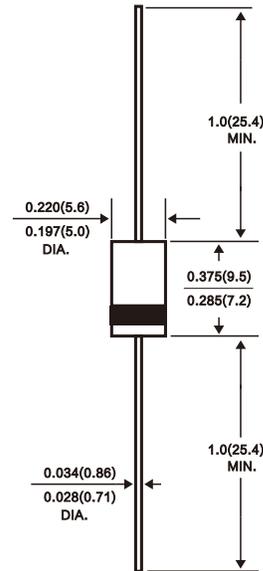


FEATURES

- * 1500W surge capability at 1ms
- * Excellent clamping capability
- * Low zener impedance
- * Fast response time : typically less than 1.0 ps from 0 volt to $V_{BR(min.)}$
- * Typical I_R less than $1\mu A$ above 10V

MECHANICAL DATA

- * Case : DO-201AD Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end except Bipolar.
- * Mounting position : Any
- * Weight : 1.21 grams

DO-27(DO-201AD)


Dimensions in inches and (millimeters)

DEVICES FOR BIPOLAR APPLICATIONS

For Bi-directional use C or CA Suffix
 Electrical characteristics apply in both directions

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Peak Power Dissipation at $T_a = 25\text{ }^\circ\text{C}$, $T_p=1\text{ms}$ (Note 1)	PPK	Minimum 1500	Watts
Steady State Power Dissipation at $T_L = 75\text{ }^\circ\text{C}$ Lead Lengths 0.375", (9.5mm) (Note 2)	PD	5.0	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note 3)	IFSM	200	Amps.
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175	$^\circ\text{C}$

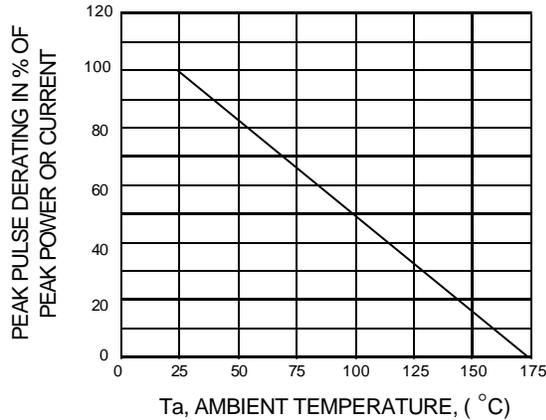
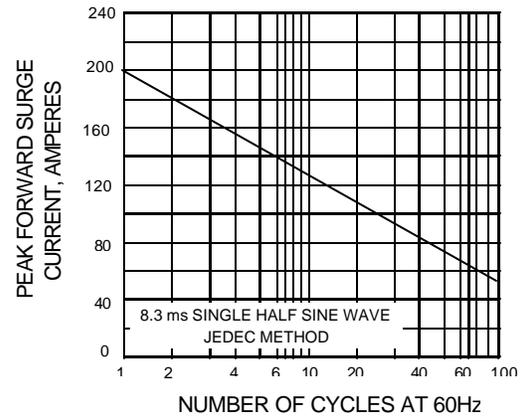
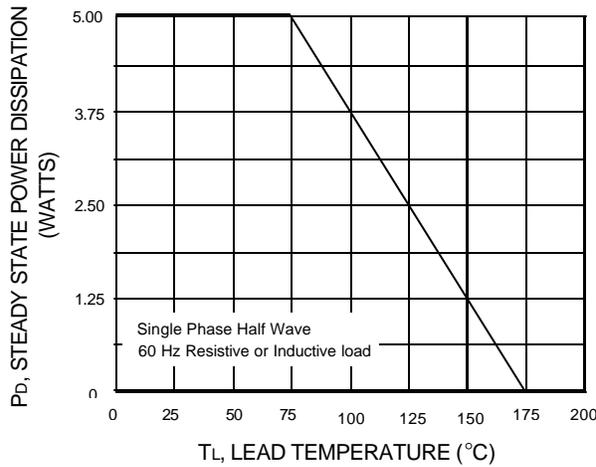
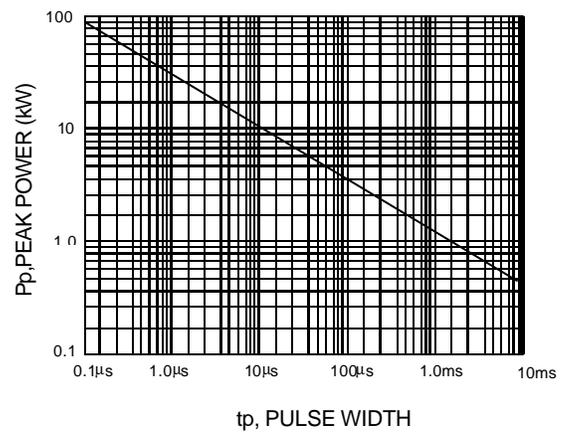
Note :

- (1) Non-repetitive Current pulse, per Fig. 5 and derated above $T_a = 25\text{ }^\circ\text{C}$ per Fig. 1
- (2) Mounted on Copper Leaf area of 1.57 in^2 (40mm^2).
- (3) 8.3 ms single half sine-wave, duty cycle = 4 pulses per minutes maximum.

ELECTRICAL CHARACTERISTICS

Rating at = 25 °C ambient temperature unless otherwise specified

TYPE	Breakdown Voltage @ It (Note 1)		Working Peak Reverse Voltage	Maximum Reverse Leakage @ VRWM	Maximum Reverse Current	Maximum Clamping Voltage @ IRSM	Maximum Temperature Co-efficient of VBR	
	VBR (V)							VRWM
Unidirectional Axial Lead	Min.	Max.	It (mA)	(V)	(μ A)	(A)	(V)	(% / °C)
1.5KE6.8A(CA)	6.45	7.14	10	5.80	1000	143	10.5	0.057
1.5KE7.5A(CA)	7.13	7.88	10	6.40	500	132	11.3	0.061
1.5KE8.2A(CA)	7.79	8.61	10	7.02	200	124	12.1	0.065
1.5KE9.1A(CA)	8.65	9.55	1.0	7.78	50	112	13.4	0.068
1.5KE10A(CA)	9.50	10.5	1.0	8.55	10	103	14.5	0.073
1.5KE11A(CA)	10.5	11.6	1.0	9.40	5.0	96.0	15.6	0.075
1.5KE12A(CA)	11.4	12.6	1.0	10.2	5.0	90.0	16.7	0.078
1.5KE13A(CA)	12.4	13.7	1.0	11.1	5.0	82.0	18.2	0.081
1.5KE15A(CA)	14.3	15.8	1.0	12.8	5.0	71.0	21.2	0.084
1.5KE16A(CA)	15.2	16.8	1.0	13.6	5.0	67.0	22.5	0.086
1.5KE18A(CA)	17.1	18.9	1.0	15.3	5.0	59.5	25.2	0.088
1.5KE20A(CA)	19.0	21.0	1.0	17.1	5.0	54.0	27.7	0.090
1.5KE22A(CA)	20.9	23.1	1.0	18.8	5.0	49.0	30.6	0.092
1.5KE24A(CA)	22.8	25.2	1.0	20.5	5.0	45.0	33.2	0.094
1.5KE27A(CA)	25.7	28.4	1.0	23.1	5.0	40.0	37.5	0.096
1.5KE30A(CA)	28.5	31.5	1.0	25.6	5.0	36.0	41.4	0.097
1.5KE33A(CA)	31.4	34.7	1.0	28.2	5.0	33.0	45.7	0.098
1.5KE36A(CA)	34.2	37.8	1.0	30.8	5.0	30.0	49.9	0.099
1.5KE39A(CA)	37.1	41.0	1.0	33.3	5.0	28.0	53.9	0.100
1.5KE43A(CA)	40.9	45.2	1.0	36.8	5.0	25.3	59.3	0.101
1.5KE47A(CA)	44.7	49.4	1.0	40.2	5.0	23.2	64.8	0.101
1.5KE51A(CA)	48.5	53.6	1.0	43.6	5.0	21.4	70.1	0.102
1.5KE56A(CA)	53.2	58.8	1.0	47.8	5.0	19.5	77.0	0.103
1.5KE62A(CA)	58.9	65.1	1.0	53.0	5.0	17.7	85.0	0.104
1.5KE68A(CA)	64.6	71.4	1.0	58.1	5.0	16.3	92.0	0.104
1.5KE75A(CA)	71.3	78.8	1.0	64.1	5.0	14.6	103	0.105
1.5KE82A(CA)	77.9	86.1	1.0	70.1	5.0	13.3	113	0.105
1.5KE91A(CA)	86.5	95.5	1.0	77.8	5.0	12.0	125	0.106
1.5KE100A(CA)	95.0	105	1.0	85.5	5.0	11.0	137	0.106
1.5KE110A(CA)	105	116	1.0	94.0	5.0	9.9	152	0.107
1.5KE120A(CA)	114	126	1.0	102	5.0	9.1	165	0.107
1.5KE130A(CA)	124	137	1.0	111	5.0	8.4	179	0.107
1.5KE150A(CA)	143	158	1.0	128	5.0	7.2	207	0.108
1.5KE160A(CA)	152	168	1.0	136	5.0	6.8	219	0.108
1.5KE170A(CA)	162	179	1.0	145	5.0	6.4	234	0.108
1.5KE180A(CA)	171	189	1.0	154	5.0	6.1	246	0.108
1.5KE200A(CA)	190	210	1.0	171	5.0	5.5	274	0.108
1.5KE220A(CA)	209	231	1.0	185	5.0	4.6	328	0.108
1.5KE250A(CA)	237	263	1.0	214	5.0	5.0	344	0.110
1.5KE300A(CA)	285	315	1.0	256	5.0	5.0	414	0.110
1.5KE350A(CA)	332	368	1.0	300	5.0	4.0	482	0.110
1.5KE400A(CA)	380	420	1.0	342	5.0	4.0	548	0.110
1.5KE440A(CA)	418	462	1.0	376	5.0	2.50	602	0.110

FIG.1 - PULSE DERATING CURVE

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

FIG.3 - STEADY STATE POWER DERATING

FIG.4 - PULSE RATING CURVE

FIG.5 - PULSE WAVEFORM
