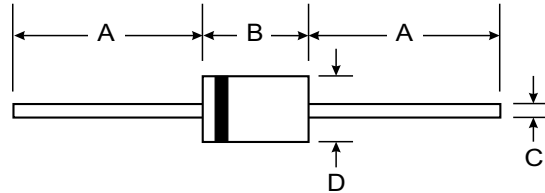


Features

- 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-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ C$ unless otherwise specified

Rating	Symbol	Value	Unit
Peak Power Dissipation at $T_a = 25^\circ C$, $T_p=1ms$ (Note1)	PPK	1500	Watts
Steady State Power Dissipation at $T_L = 75^\circ C$ 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)	I_{FSM}	200	Amps.
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175	$^\circ C$

Note :

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



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 (% / °C)	
	VBR (V)							VRWM
	Unidirectional Axial Lead	Min.	Max.	(mA)	(V)	(μ A)		(A)
1N6267CA	6.12	7.48	10	5.50	1000	139	10.8	0.057
1N6267A	6.45	7.14	10	5.80	1000	143	10.5	0.057
1N6268CA	6.75	8.25	10	6.05	500	128	11.7	0.061
1N6268A	7.13	7.88	10	6.40	500	132	11.3	0.061
1N6269CA	7.38	9.02	10	6.63	200	120	12.5	0.065
1N6269A	7.79	8.61	10	7.02	200	124	12.1	0.065
1N6270CA	8.19	10.0	1.0	7.37	50	109	13.8	0.068
1N6270A	8.65	9.55	1.0	7.78	50	112	13.4	0.068
1N6271CA	9.00	11.0	1.0	8.10	10	100	15.0	0.073
1N6271A	9.50	10.5	1.0	8.55	10	103	14.5	0.073
1N6272CA	9.90	12.1	1.0	8.92	5.0	93.0	16.2	0.075
1N6272A	10.5	11.6	1.0	9.40	5.0	96.0	15.6	0.075
1N6273CA	10.8	13.2	1.0	9.72	5.0	87.0	17.3	0.078
1N6273A	11.4	12.6	1.0	10.2	5.0	90.0	16.7	0.078
1N6274CA	11.7	14.3	1.0	10.5	5.0	79.0	19.0	0.081
1N6274A	12.4	13.7	1.0	11.1	5.0	82.0	18.2	0.081
1N6275CA	13.5	16.5	1.0	12.1	5.0	68.0	22.0	0.084
1N6275A	14.3	15.8	1.0	12.8	5.0	71.0	21.2	0.084
1N6276CA	14.4	17.6	1.0	12.9	5.0	64.0	23.5	0.086
1N6276A	15.2	16.8	1.0	13.6	5.0	67.0	22.5	0.086
1N6277CA	16.2	19.8	1.0	14.5	5.0	56.5	26.5	0.088
1N6277A	17.1	18.9	1.0	15.3	5.0	59.5	25.2	0.088
1N6278CA	18.0	22.0	1.0	16.2	5.0	51.5	29.1	0.090
1N6278A	19.0	21.0	1.0	17.1	5.0	54.0	27.7	0.090
1N6279CA	19.8	24.2	1.0	17.8	5.0	47.0	31.9	0.092
1N6279A	20.9	23.1	1.0	18.8	5.0	49.0	30.6	0.092
1N6280CA	21.6	26.4	1.0	19.4	5.0	43.0	34.7	0.094
1N6280A	22.8	25.2	1.0	20.5	5.0	45.0	33.2	0.094
1N6281CA	24.3	29.7	1.0	21.8	5.0	38.5	39.1	0.096
1N6281A	25.7	28.4	1.0	23.1	5.0	40.0	37.5	0.096
1N6282CA	27.0	33.0	1.0	24.3	5.0	34.5	43.5	0.097
1N6282A	28.5	31.5	1.0	25.6	5.0	36.0	41.4	0.097
1N6283CA	29.7	36.3	1.0	26.8	5.0	31.5	47.7	0.098
1N6283A	31.4	34.7	1.0	28.2	5.0	33.0	45.7	0.098
1N6284CA	32.4	39.6	1.0	29.1	5.0	29.0	52.0	0.099
1N6284A	34.2	37.8	1.0	30.8	5.0	30.0	49.9	0.099
1N6285CA	35.1	42.9	1.0	31.6	5.0	26.5	56.4	0.100
1N6285A	37.1	41.0	1.0	33.3	5.0	28.0	53.9	0.100
1N6286CA	38.7	47.3	1.0	34.8	5.0	24.0	61.9	0.101
1N6286A	40.9	45.2	1.0	36.8	5.0	25.3	59.3	0.101
1N6287CA	42.3	51.7	1.0	38.1	5.0	22.2	67.8	0.101
1N6287A	44.7	49.4	1.0	40.2	5.0	23.2	64.8	0.101
1N6288CA	45.9	56.1	1.0	41.3	5.0	20.4	73.5	0.102
1N6288A	48.5	53.6	1.0	43.6	5.0	21.4	70.1	0.102
1N6289CA	50.4	61.6	1.0	45.4	5.0	18.6	80.5	0.103
1N6289A	53.2	58.8	1.0	47.8	5.0	19.5	77.0	0.103
1N6290CA	55.8	68.2	1.0	50.2	5.0	16.9	89.0	0.104



TYPE	Breakdown Voltage @ I_t (Note 1)			Working Peak Reverse Voltage	Maximum Reverse Leakage @ V_{RWM}	Maximum Reverse Current	Maximum Clamping Voltage @ I_{RSM}	Maximum Temperature Co-efficient of V_{BR} (% / °C)
	V_{BR} (V)		I_t					
	Min.	Max.	(mA)	(V)	(μ A)	(A)	(V)	
1N6290A	58.9	65.1	1.0	53.0	5.0	17.7	85.0	0.104
1N6291CA	61.2	74.8	1.0	55.1	5.0	15.3	98.0	0.104
1N6291A	64.6	71.4	1.0	58.1	5.0	16.3	92.0	0.104
1N6292CA	67.5	82.5	1.0	60.7	5.0	13.9	108	0.105
1N6292A	71.3	78.8	1.0	64.1	5.0	14.6	103	0.105
1N6293CA	73.8	90.2	1.0	66.4	5.0	12.7	118	0.105
1N6293A	77.9	86.1	1.0	70.1	5.0	13.3	113	0.105
1N6294CA	81.9	100	1.0	73.7	5.0	11.4	131	0.106
1N6294A	86.5	95.5	1.0	77.8	5.0	12.0	125	0.106
1N6295CA	90.0	110	1.0	81.0	5.0	10.4	144	0.106
1N6295A	95.0	105	1.0	85.5	5.0	11.0	137	0.106
1N6296CA	99.0	121	1.0	89.2	5.0	9.5	158	0.107
1N6296A	105	116	1.0	94.0	5.0	9.9	152	0.107
1N6297CA	108	132	1.0	97.2	5.0	8.7	173	0.107
1N6297A	114	126	1.0	102	5.0	9.1	165	0.107
1N6298CA	117	143	1.0	105	5.0	8.0	187	0.107
1N6298A	124	137	1.0	111	5.0	8.4	179	0.107
1N6299CA	135	165	1.0	121	5.0	7.0	215	0.108
1N6299A	143	158	1.0	128	5.0	7.2	207	0.108
1N6300CA	144	176	1.0	130	5.0	6.5	230	0.108
1N6300A	152	168	1.0	136	5.0	6.8	219	0.108
1N6301CA	153	187	1.0	138	5.0	6.2	244	0.108
1N6301A	162	179	1.0	145	5.0	6.4	234	0.108
1N6302CA	162	198	1.0	146	5.0	5.8	258	0.108
1N6302A	171	189	1.0	154	5.0	6.1	246	0.108
1N6303CA	180	220	1.0	162	5.0	5.2	287	0.108
1N6303A	190	210	1.0	171	5.0	5.5	274	0.108

Note:

- (1) V_{BR} measured after I_t applied for 300 μ s.. I_t = square wave pulse or equivalent.
- (2) V_F = 3.5 V_{max} .. I_F = 100 Ambs. (6.8 Volts thru 91 Volts)
 V_F = 5.0 V_{max} .. I_F = 100 Ambs. (100 Volts thru 200 Volts) per 1/2 square or equivalent sine wave.
 PW = 8.3 ms, duty cycle = 4 pulses per minute maximum.



FIG.1 - PULSE DERATING CURVE

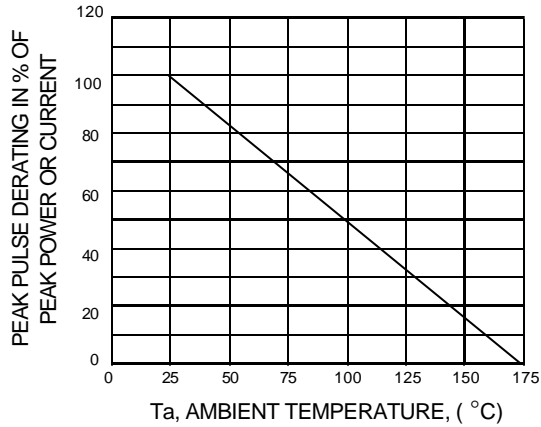


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

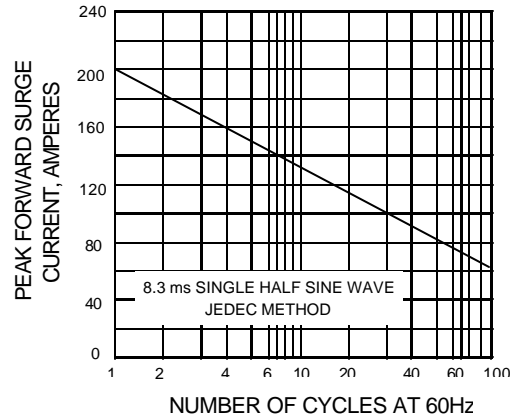


FIG.3 - STEADY STATE POWER DERATING

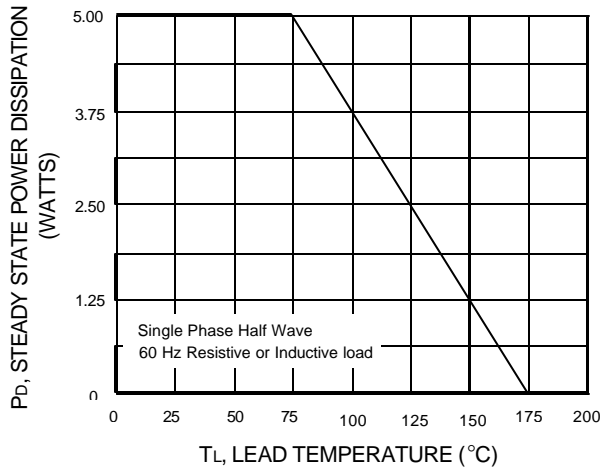


FIG.4 - PULSE RATING CURVE

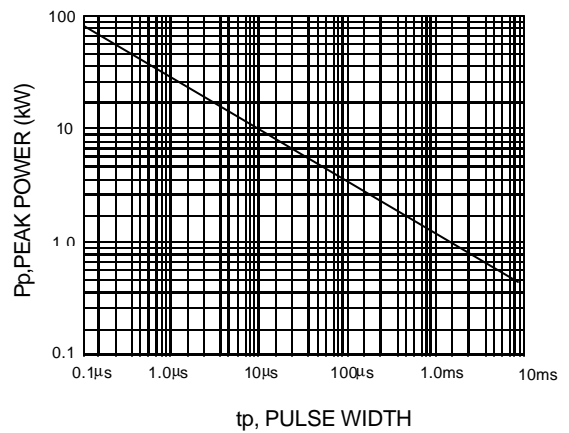


FIG.5 - PULSE WAVEFORM

