



# 1N5338B SERIES

## SILICON ZENER DIODES

<b>VOLTAGE</b>	<b>5.1 to 51 Volt</b>	<b>DCK 9F</b>	<b>5 Watt</b>
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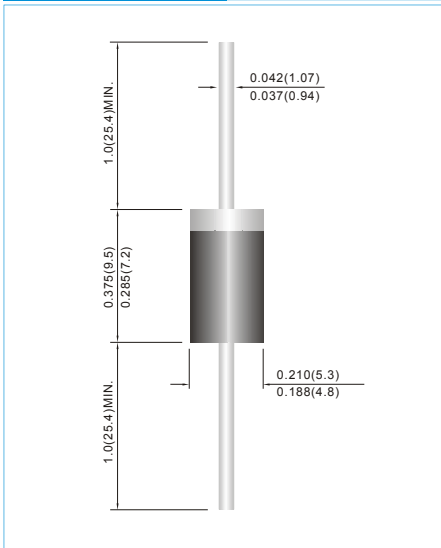
**DO-201AE** Unit : inch(mm)

### FEATURES

- Low inductance
- Typical  $I_D$  less than 1 $\mu$ A above 13V
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Lead free in compliance with EU RoHS 2.0

### MECHANICAL DATA

- Case: JEDEC DO-201AE molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0395 ounce, 1.122 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
DC Power Dissipation on $T_c = 75^\circ\text{C}$ , Measure at Zero Lead Length Derate above 75°C ( NOTE 1)	$P_D$	5	Watts
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

**NOTE :**

1. Mounted on 8mm<sup>2</sup> copper pads to each terminal.



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Part Number	Nominal Zener Voltage			Maximum Zener Impedance				Maximum Leakage Current	
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub>	V <sub>R</sub>
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
1N5338B	5.1	4.85	5.36	2	240	400	1	10	1
1N5339B	5.6	5.32	5.88	1	220	400	1	10	2
1N5340B	6	5.7	6.30	1	200	300	1	10	3
1N5341B	6.2	5.89	6.51	1	200	200	1	10	3
1N5342B	6.8	6.46	7.14	1	175	200	1	10	5.2
1N5343B	7.5	7.13	7.88	2	175	200	1	10	5.7
1N5344B	8.2	7.79	8.61	2	150	200	1	10	6.2
1N5345B	8.7	8.27	9.14	2	150	200	1	10	6.6
1N5346B	9.1	8.65	9.56	2	150	150	1	7.5	6.9
1N5347B	10	9.5	10.5	2	125	125	1	5	7.6
1N5348B	11	10.45	11.55	3	125	125	1	5	8.4
1N5349B	12	11.4	12.6	3	100	125	1	2	9.1
1N5350B	13	12.35	13.65	3	100	100	1	1	9.9
1N5351B	14	13.3	14.7	3	100	75	1	1	10.6
1N5352B	15	14.25	15.75	3	75	75	1	1	11.5
1N5353B	16	15.2	16.8	3	75	75	1	1	12.2
1N5354B	17	16.15	17.85	3	70	75	1	0.5	12.9
1N5355B	18	17.1	18.9	3	65	75	1	0.5	13.7
1N5356B	19	18.05	19.95	3	65	75	1	0.5	14.4
1N5357B	20	19	21	3	65	75	1	0.5	15.2
1N5358B	22	20.9	23.1	4	50	75	1	0.5	16.7
1N5359B	24	22.8	25.2	4	50	100	1	0.5	18.2
1N5360B	25	23.75	26.25	4	50	110	1	0.5	19
1N5361B	27	25.65	28.35	5	50	120	1	0.5	20.6
1N5362B	28	26.6	29.4	6	50	130	1	0.5	21.2
1N5363B	30	28.5	31.5	8	40	140	1	0.5	22.8
1N5364B	33	31.35	34.65	10	40	150	1	0.5	25.1
1N5365B	36	34.2	37.8	11	30	160	1	0.5	27.4
1N5366B	39	37.05	40.95	14	30	170	1	0.5	29.7
1N5367B	43	40.85	45.15	20	30	190	1	0.5	32.7
1N5368B	47	44.65	49.35	25	25	210	1	0.5	35.8
1N5369B	51	48.45	53.55	27	25	230	1	0.5	38.8



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## RATING AND CHARACTERISTIC CURVES



Fig.1 Power temperature Derating Curve

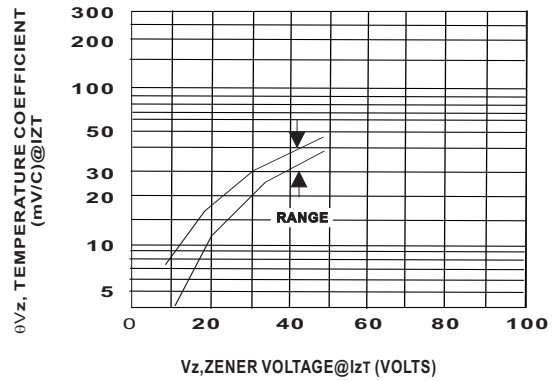


Fig.2 Temperature Coefficient-Range for Units 11 to 39 Volts

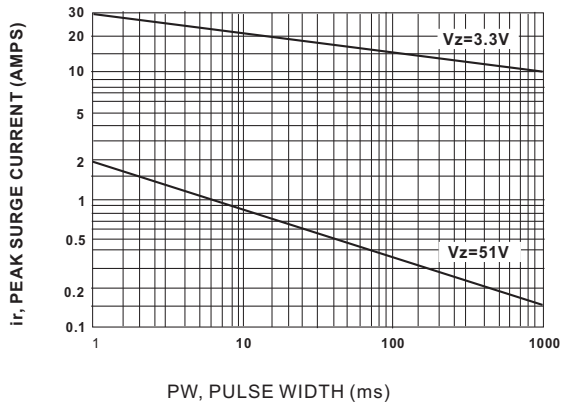


Fig.3 Peak Surge Current versus Pulse Width

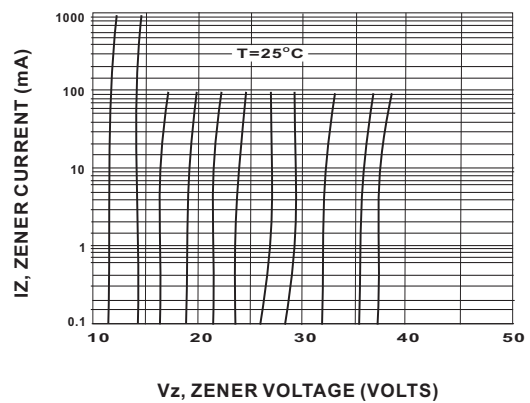


Fig.4 Zener Voltage versus Zener Current Vz=11 thru 39 Volts



## 1N5338B SERIES

### Part No\_packing code\_Version

1N5338B\_AY\_00001  
1N5338B\_AY\_10001  
1N5338B\_B0\_00001  
1N5338B\_B0\_10001  
1N5338B\_R2\_00001  
1N5338B\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			