

*New Jersey Semi-Conductor Products, Inc.*

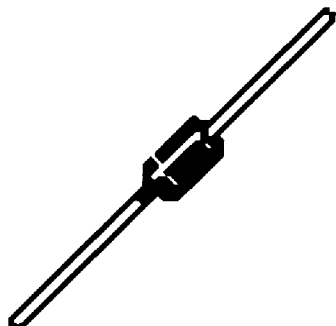
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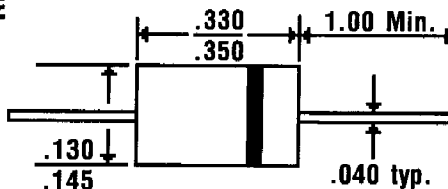
## 1N5333...5382 Series

### 5 Watt ZENER DIODES (3.3V to 200V)

#### Mechanical Dimensions



JEDEC  
 DO-201AE



#### Features

■ WIDE VOLTAGE RANGE

■ MEETS UL SPECIFICATION 94V-0

Maximum Ratings	1N5333...5382 Series	Units
DC Power Dissipation with $T_c = > = 75^\circ\text{C} \dots P_D$	5.0	W
Lead Length = .375 Inches Derate Above $75^\circ\text{C}$	40	mW / $^\circ\text{C}$
Operating & Storage Temperature Range... $T_J, T_{\text{STRG}}$	-65 to 200	$^\circ\text{C}$



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**NOTES:** 1. The JEDEC part numbers shown indicate a 5% tolerance.

2.  $I_z$  is applied for 40 + 10ms prior to reading. Mounting contacts are located .375" to .500" from the inside edge of mounting clips to the diode body.  $T_A = 25^\circ\text{C}$ , +8, -2°C.

**Electrical Characteristics @ 25°C.**

Part # Jedec Type #	Nominal Zener Voltage (2), $V_z$ (V)	Test Current $I_{zT}$ (mA)	Max. Zener Impedance (2)		Max. Reverse Leakage Current @ $V_R$		Max. Surge Current (3) $I_s$ (A)
			$Z_{zT}$ @ $I_{zT}$ ( $\Omega$ )	$Z_{zK}$ @ $I_{zK} = 1.0\text{mA}$ ( $\Omega$ )	$I_R$ ( $\mu\text{A}$ )	$V_R$ (V)	
1N5333B	3.3	380	3.0	400	300	1	20
1N5334B	3.6	350	2.5	500	150	1	18.7
1N5335B	3.9	320	2.0	500	50	1	17.6
1N5336B	4.3	290	2.0	500	10	1	16.4
1N5337B	4.7	260	2.0	450	5.0	1	15.3
1N5338B	5.1	240	1.5	400	1.0	1	14.4
1N5339B	5.6	220	1.0	400	1.0	2	13.4
1N5340B	6.0	200	1.0	300	1.0	3	12.7
1N5341B	6.2	200	1.0	200	1.0	3	12.4
1N5342B	6.8	175	1.0	200	10	5.2	11.5
1N5343B	7.5	175	1.5	200	10	5.7	10.7
1N5344B	8.2	150	1.5	200	10	6.2	10
1N5345B	8.7	150	2.0	200	10	6.6	9.5
1N5346B	9.1	150	2.0	150	7.5	6.9	9.2
1N5347B	10	125	2.0	125	5.0	7.6	8.6
1N5348B	11	125	2.5	125	5.0	8.4	8.0
1N5349B	12	100	2.5	125	2.0	9.1	7.5
1N5350B	13	100	2.5	100	1.0	9.9	7.0
1N5351B	14	100	2.5	75	1.0	10.6	6.7
1N5352B	15	75	2.5	75	1.0	11.5	6.3
1N5353B	16	75	2.5	75	1.0	12.2	6.0
1N5354B	17	70	2.5	75	0.5	12.9	5.8
1N5355B	18	65	2.5	75	0.5	13.7	5.5
1N5356B	19	65	3.0	75	0.5	14.4	5.3
1N5357B	20	65	3.0	75	0.5	15.2	5.1
1N5358B	22	50	3.5	75	0.5	16.7	4.7
1N5359B	24	50	3.5	100	0.5	18.2	4.4
1N5360B	25	50	4.0	110	0.5	19	4.3
1N5361B	27	50	5.0	120	0.5	20.6	4.1
1N5362B	28	50	6.0	130	0.5	21.2	3.9
1N5363B	30	40	8.0	140	0.5	22.8	3.7
1N5364B	33	40	10	150	0.5	25.1	3.5
1N5365B	36	30	11	160	0.5	27.4	3.3
1N5366B	39	30	14	170	0.5	29.7	3.1
1N5367B	43	30	20	190	0.5	32.7	2.8

**Electrical Characteristics @ 25°C.**

Part # Jedec Type # (1)	Nominal Zener Voltage (2), $V_z$ (V)	Test Current $I_{zT}$ (mA)	Max. Zener Impedance (2)		Max. Reverse Leakage Current @ $V_R$		Max. Surge Current (3) $I_s$ (A)
			$Z_{zT}$ @ $I_{zT}$ ( $\Omega$ )	$Z_{zK}$ @ $I_{zK} = 1.0\text{mA}$ ( $\Omega$ )	$I_R$ ( $\mu\text{A}$ )	$V_R$ (V)	
1N5368B	47	25	25	210	0.5	35.8	2.7
1N5369B	51	25	27	230	0.5	38.8	2.5
1N5370B	56	20	35	280	0.5	42.6	2.3
1N5371B	60	20	40	350	0.5	42.5	2.2
1N5372B	62	20	42	400	0.5	47.1	2.1
1N5373B	68	20	44	500	0.5	51.7	2.0
1N5374B	75	20	45	620	0.5	56	1.9
1N5375B	82	15	65	720	0.5	62.2	1.8
1N5376B	87	15	75	760	0.5	66	1.7
1N5377B	91	15	75	760	0.5	69.2	1.6
1N5378B	100	12	90	800	0.5	76	1.5
1N5379B	110	12	125	1000	0.5	83.6	1.4
1N5380B	120	10	170	1150	0.5	91.2	1.3
1N5381B	130	10	190	1250	0.5	98.8	1.2
1N5382B	140	8.0	230	1500	0.5	106	1.2
1N5383B	150	8.0	330	1500	0.5	114	1.1
1N5384B	160	8.0	350	1650	0.5	122	1.1
1N5385B	170	8.0	380	1750	0.5	129	1.0
1N5386B	180	5.0	430	1750	0.5	137	1.0
1N5387B	190	5.0	450	1850	0.5	144	0.9
1N5388B	200	5.0	480	1850	0.5	152	0.9