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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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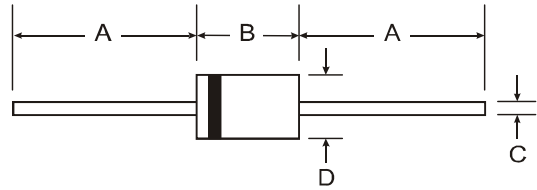


## Features

- 500mW Power Dissipation
- High Stability
- Surface Mount Equivalents Available
- Hermetic Package
- Vz - Tolerance  $\pm 5\%$
- **Lead Free Finish, RoHS Compliant (Note 2)**

## Mechanical Data

- Case: DO-35
- Case Material: Glass
- Moisture Sensitivity: Level 1 per J-STD-020
- Leads: Solderable per MIL-STD-202, Method 208
- Terminals: Finish - Sn96.5Ag3.5. Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.13 grams (approximate)



DO-35		
Dim	Min	Max
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

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

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	$P_D$	500	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300	$^\circ\text{C}/\text{W}$
Forward Voltage @ $I_F = 200\text{mA}$	$V_F$	1.1	V
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +200	$^\circ\text{C}$

- Notes:
1. Valid provided that leads are kept at  $T_L \leq 75^\circ\text{C}$  with lead length = 9.5mm (3/8") from case; derate above  $75^\circ\text{C}$ .
  2. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes.



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**Electrical Characteristics**

@T<sub>A</sub> = 25°C unless otherwise specified

**Table 1**

Type Number	Zener Voltage Range (Note 3)			Test Current	Maximum Zener Impedance		Maximum Reverse Current		Maximum Temperature Coefficient @ I <sub>ZT</sub>
	V <sub>Z</sub> @ I <sub>ZT</sub>			I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub> = 0.25mA	I <sub>R</sub>	@V <sub>R</sub>	
	Nom (V)	Min (V)	Max (V)	mA	Ω	Ω	μA	V	
1N5221B	2.4	2.28	2.52	20	30	1200	100	1.0	-0.085
1N5222B	2.5	2.38	2.63	20	30	1250	100	1.0	-0.085
1N5223B	2.7	2.57	2.84	20	30	1300	75	1.0	-0.080
1N5224B	2.8	2.66	2.94	20	30	1400	75	1.0	-0.080
1N5225B	3.0	2.85	3.15	20	29	1600	50	1.0	-0.075
1N5226B	3.3	3.14	3.47	20	28	1600	25	1.0	-0.070
1N5227B	3.6	3.42	3.78	20	24	1700	15	1.0	-0.065
1N5228B	3.9	3.71	4.10	20	23	1900	10	1.0	-0.060
1N5229B	4.3	4.09	4.52	20	22	2000	5.0	1.0	+0.055
1N5230B	4.7	4.47	4.94	20	19	1900	5.0	2.0	+0.030
1N5231B	5.1	4.85	5.36	20	17	1600	5.0	2.0	+0.030
1N5232B	5.6	5.32	5.88	20	11	1600	5.0	3.0	+0.038
1N5233B	6.0	5.70	6.30	20	7.0	1600	5.0	3.5	+0.038
1N5234B	6.2	5.89	6.51	20	7.0	1000	5.0	4.0	+0.045
1N5235B	6.8	6.46	7.14	20	5.0	750	3.0	5.0	+0.050
1N5236B	7.5	7.13	7.88	20	6.0	500	3.0	6.0	+0.058
1N5237B	8.2	7.79	8.61	20	8.0	500	3.0	6.5	+0.062
1N5238B	8.7	8.27	9.14	20	8.0	600	3.0	6.5	+0.065
1N5239B	9.1	8.65	9.56	20	10	600	3.0	7.0	+0.068
1N5240B	10	9.50	10.50	20	17	600	3.0	8.0	+0.075
1N5241B	11	10.45	11.55	20	22	600	2.0	8.4	+0.076
1N5242B	12	11.40	12.60	20	30	600	1.0	9.1	+0.077
1N5243B	13	12.35	13.65	9.5	13	600	0.5	9.9	+0.079
1N5244B	14	13.30	14.70	9.0	15	600	0.1	10	+0.082
1N5245B	15	14.25	15.75	8.5	16	600	0.1	11	+0.082
1N5246B	16	15.20	16.80	7.8	17	600	0.1	12	+0.083
1N5247B	17	16.15	17.85	7.4	19	600	0.1	13	+0.084
1N5248B	18	17.10	18.90	7.0	21	600	0.1	14	+0.085
1N5249B	19	18.05	19.95	6.6	23	600	0.1	14	+0.086
1N5250B	20	19.00	21.00	6.2	25	600	0.1	15	+0.086
1N5251B	22	20.90	23.10	5.6	29	600	0.1	17	+0.087
1N5252B	24	22.80	25.20	5.2	33	600	0.1	18	+0.087
1N5253B	25	23.75	26.25	5.0	35	600	0.1	19	+0.089
1N5254B	27	25.65	28.35	4.6	41	600	0.1	21	+0.090
1N5255B	28	26.60	29.40	4.5	44	600	0.1	21	+0.091
1N5256B	30	28.50	31.50	4.2	49	600	0.1	23	+0.091
1N5257B	33	31.35	34.65	3.8	58	700	0.1	25	+0.092
1N5258B	36	34.20	37.80	3.4	70	700	0.1	27	+0.093
1N5259B	39	37.05	40.95	3.2	80	800	0.1	30	+0.094
1N5260B	43	40.85	45.15	3.0	93	900	0.1	33	+0.095
1N5261B	47	44.65	49.35	2.7	105	1000	0.1	36	+0.095
1N5262B	51	48.45	53.55	2.5	125	1100	0.1	39	+0.096
1N5263B	56	53.20	58.80	2.2	150	1300	0.1	43	+0.096
1N5264B	60	57.00	63.00	2.1	170	1400	0.1	46	+0.097
1N5265B	62	58.90	65.10	2.0	185	1400	0.1	47	+0.097
1N5266B	68	64.60	71.40	1.8	230	1600	0.1	52	+0.097
1N5267B	75	71.25	78.75	1.7	270	1700	0.1	56	+0.098

Notes: 3. Based on dc measurement at thermal equilibrium; lead length = 9.5mm (3/8"); thermal resistance of heat sink = 30°C/W.





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**Ordering Information** (Notes 4 & 5)

Device	Packaging	Shipping
(Type Number)-A	DO-35	5K/Ammo Pack
(Type Number)-T	DO-35	10K/Tape & Reel

Notes: 4. Add "-A" or "-T" to the appropriate type number in Table 1. Example: 6.2V Zener = 1N5234B-A for ammo pack.  
5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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