

## SILICON 400mW ZENER DIODES 6.8V TO 47V

1N957B to 1N977B



DO- 35  
Glass Axial Package

### Hermetically Sealed Glass Package Zener Diodes

ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$  unless specified otherwise )

DESCRIPTION		VALUE						UNIT
Zener Voltage		6.8 to 47						V
Steady State Power Dissipation		400						mW
Derating Factor above 50°C		3.2						mW/°C
Operating and Storage Temperature		-65 to +175						°C

ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$  unless specified otherwise )

$VF \leq 1.5\text{V max} @ I_F=200\text{mA}$

Device (Note 1)	* Nominal Zener Voltage	Zener Test Current	Max Zener Impedance		Max Reverse Leakage Current		Max DC Zener Current	Max. Surge Current (Recurrent)	Max Temp. Coefficient Voltage
			$Z_{ZT} @ I_{ZT}$	$I_{ZT}$	$Z_{ZK} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$			
	(Volts)	(mA)	(W)	(W)	(mA)	(mA)	(mA)	(mA)	% / °C
1N957B	6.8	18.5	4.5	700	1.0	150	5.2	55	+0.05
1N958B	7.5	16.5	5.5	700	0.5	75	5.7	50	+0.058
1N959B	8.2	15	6.5	700	0.5	50	6.2	45	+0.065
1N960B	9.1	14	7.5	700	0.5	25	6.9	41	+0.068
1N961B	10	12.5	8.5	700	0.25	10	7.6	38	+0.075
1N962B	11	11.5	9.5	700	0.25	5	8.4	32	+0.076
1N963B	12	10.5	11.5	700	0.25	5	9.1	31	+0.077
1N964B	13	9.5	13	700	0.25	5	9.9	28	+0.079
1N965B	15	8.5	16	700	0.25	5	11.4	25	+0.082
1N966B	16	7.8	17	700	0.25	5	12.2	24	+0.083
1N967B	18	7.0	21	750	0.25	5	13.7	20	+0.085
1N968B	20	6.2	25	750	0.25	5	15.2	18	+0.086
1N969B	22	5.6	29	750	0.25	5	16.7	16	+0.087
1N970B	24	5.2	33	750	0.25	5	18.2	15	+0.088
1N971B	27	4.6	41	750	0.25	5	20.6	13	+0.090
1N972B	30	4.2	49	1000	0.25	5	22.8	12	+0.091
1N973B	33	3.8	58	1000	0.25	5	25.1	11	+0.092
1N974B	36	3.4	70	1000	0.25	5	27.4	10	+0.093
1N975B	39	3.2	80	1000	0.25	5	29.7	9.5	+0.094
1N976B	43	3.0	93	1500	0.25	5	32.7	8.8	+0.095
1N977B	47	2.7	105	1500	0.25	5	35.8	7.9	+0.095

Note (1) : Part No. suffix specifies the Tolerance of  $V_Z$

No Suffix = +/- 20%

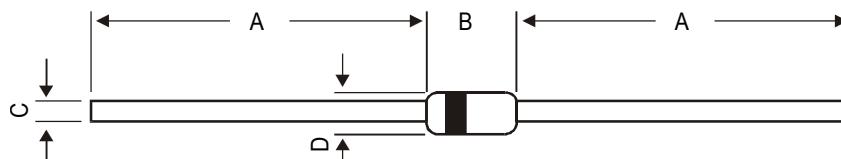
Suffix A = +/- 10%

Suffix B = +/- 5%

\* Pulse Condition : 20mS < tp 50mS, Duty Cycle <2%

**DO- 35**  
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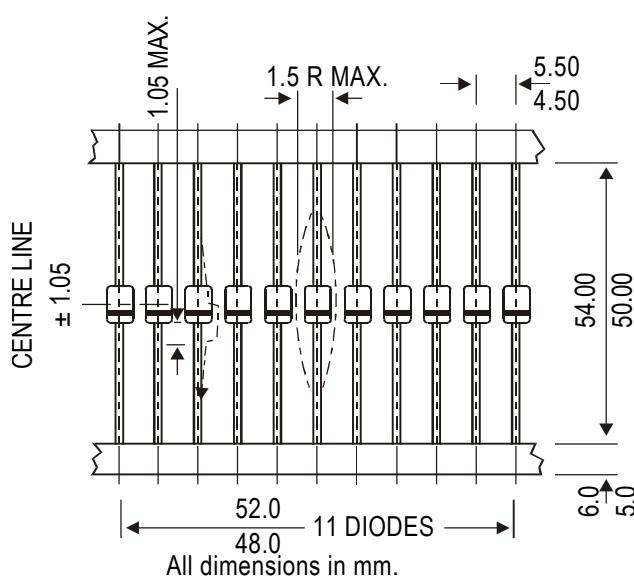
**DO-35 Hermetically Sealed Glass Axial Package**



NOTES  
 1. Cathode is marked by Band.  
 2. All dimensions are in mm.

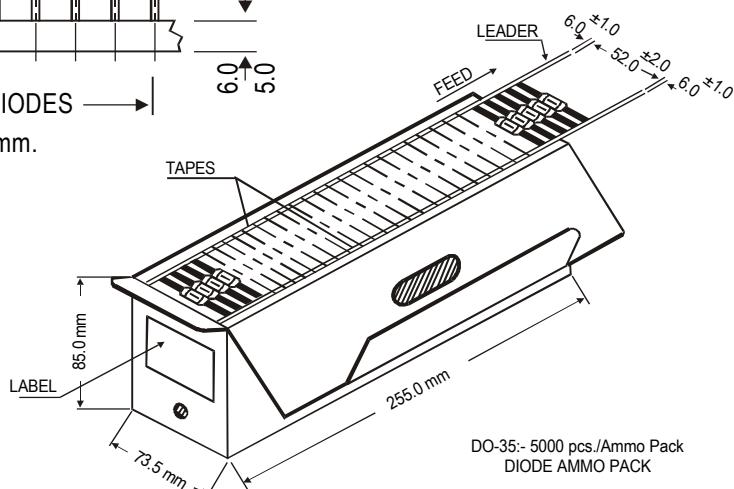
DIM	MIN	MAX
A	25.40	—
B	3.03	4.44
C	0.46	0.56
D	1.52	2.29

**DO-35, 52mm Taping Specification**



**52 mm Taping Specification**

1. T & A indicates Axial Tape & Ammo packing (52 mm Tape Spacing).
2. 300 mm (min) leader tape on every spool.
3. No. of empty places allowed 0.25% without consecutive empty places.
4. Ends of leads shall preferably not protrude beyond the tapes.
5. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.



On request also available in 26 mm Tape and Ammo Pack

**Packing Detail**

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
DO-35 T&A	5K/Ammo box	0.88 kg/5K pcs	10" x 3.5" x 3.5"	5K	12.7" x 12.7" x 20"	125K	25 kgs

### **Disclaimer**

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