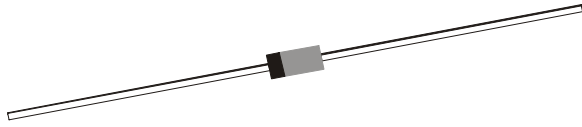


**SILICON 400mW ZENER DIODES 6.8V TO 47V**

**1N957B to 1N977B**

**DO- 35  
Glass Axial Package**



**Hermetically Sealed Glass Package Zener Diodes**

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°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<sub>a</sub>=25°C unless specified otherwise )**

**V<sub>F</sub> ≤ 1.5V max @ I<sub>F</sub>=200mA**

Device (Note 1)	* Nominal Zener Voltage  V <sub>Z</sub> @ I <sub>ZT</sub>  (Volts)	Zener Test Current  I <sub>ZT</sub>  (mA)	Max Zener Impedance			Max Reverse Leakage Current		Max DC Zener Current  I <sub>ZM</sub>  (mA)	Max. Surge Current (Recurrent)  I <sub>Z</sub> ( Surge)  (mA)	Max Temp. Coefficient Voltage  V <sub>Z</sub>  % / °C
			Z <sub>ZT</sub> @ I <sub>ZT</sub>  (W)	Z <sub>ZK</sub> @ Z <sub>ZK</sub>   I <sub>ZK</sub>  (W)   (mA)	I <sub>R</sub> @ V <sub>R</sub>  (mA)   (Volts)					
1N957B	6.8	18.5	4.5	700	1.0	150	5.2	55	300	+0.05
1N958B	7.5	16.5	5.5	700	0.5	75	5.7	50	275	+0.058
1N959B	8.2	15	6.5	700	0.5	50	6.2	45	250	+0.065
1N960B	9.1	14	7.5	700	0.5	25	6.9	41	225	+0.068
1N961B	10	12.5	8.5	700	0.25	10	7.6	38	200	+0.075
1N962B	11	11.5	9.5	700	0.25	5	8.4	32	175	+0.076
1N963B	12	10.5	11.5	700	0.25	5	9.1	31	160	+0.077
1N964B	13	9.5	13	700	0.25	5	9.9	28	150	+0.079
1N965B	15	8.5	16	700	0.25	5	11.4	25	130	+0.082
1N966B	16	7.8	17	700	0.25	5	12.2	24	120	+0.083
1N967B	18	7.0	21	750	0.25	5	13.7	20	110	+0.085
1N968B	20	6.2	25	750	0.25	5	15.2	18	100	+0.086
1N969B	22	5.6	29	750	0.25	5	16.7	16	90	+0.087
1N970B	24	5.2	33	750	0.25	5	18.2	15	80	+0.088
1N971B	27	4.6	41	750	0.25	5	20.6	13	70	+0.090
1N972B	30	4.2	49	1000	0.25	5	22.8	12	65	+0.091
1N973B	33	3.8	58	1000	0.25	5	25.1	11	60	+0.092
1N974B	36	3.4	70	1000	0.25	5	27.4	10	55	+0.093
1N975B	39	3.2	80	1000	0.25	5	29.7	9.5	46	+0.094
1N976B	43	3.0	93	1500	0.25	5	32.7	8.8	44	+0.095
1N977B	47	2.7	105	1500	0.25	5	35.8	7.9	40	+0.095

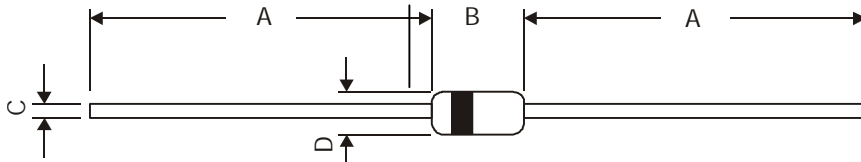
**Note (1) : Part No. suffix specifies the Tolerance of V<sub>Z</sub>**

**No Suffix = +/- 20%                      Suffix A = +/- 10%                      Suffix B = +/- 5%**

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

**DO-35**  
**Glass Axial Package**

**DO-35 Glass Axial Package**

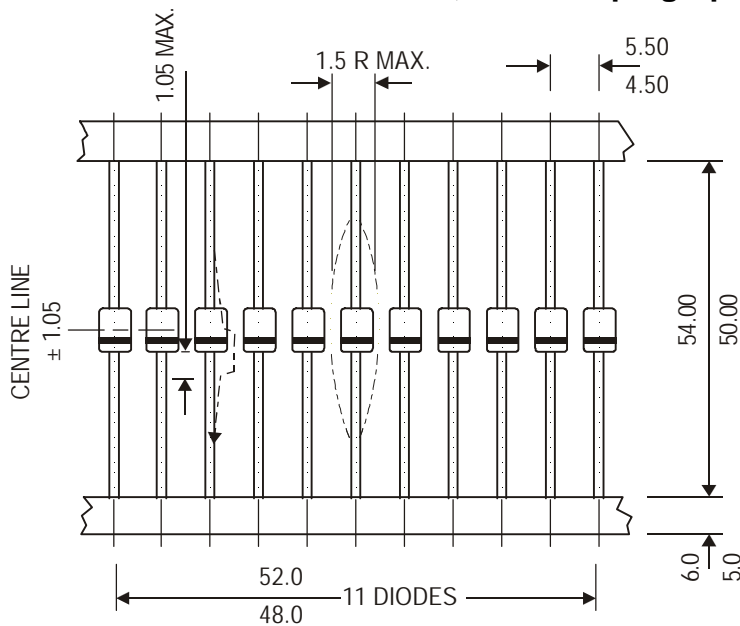


NOTE: Cathode is marked by Band.

DIM	MIN	MAX
A	25.40	—
B	3.05	4.15
C	0.46	0.56
D	1.70	2.29

All dimensions are in mm.

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

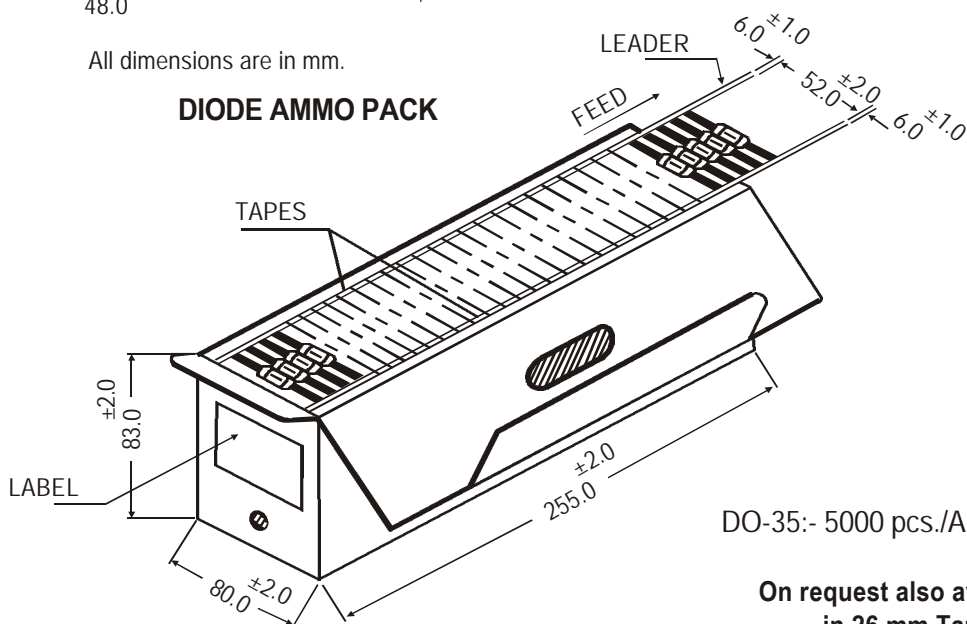


All dimensions are in mm.

**52 mm Taping Specification**

1. T & A indicates Axial Tape and Ammo Packing (52 mm Tape Spacing).
2. 300 mm (min) leader tape on every tape.
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.

**DIODE AMMO PACK**



DO-35:- 5000 pcs./Ammo Pack

On request also available  
in 26 mm Tape

**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 3.2" x 3.2"	5K	12.7" x 12.7" x 20"	125K	25 kgs

**Component Disposal Instructions**

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

**Customer Notes****Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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