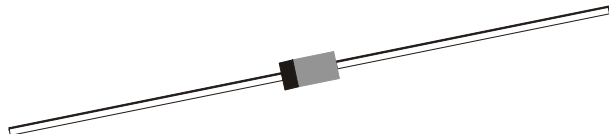


## HIGH SPEED SILICON SWITCHING DIODE AXIAL LEAD

**CD1N4148**  
**DO-35, 500mW**



**MARKING: Cathode band**  
**+**  
**4148**  
**( no body coat)**

General purpose applications. Hermetically sealed glass and the glass passivated chip Provides excellent stability.

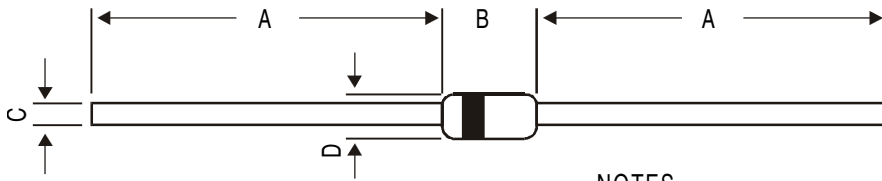
### ABSOLUTE MAXIMUM RATINGS (Ta=25 deg C otherwise specified)

| DESCRIPTION                                    | SYMBOL   | VALUE       | UNIT     |
|------------------------------------------------|----------|-------------|----------|
| Peak Repetitive Reverse Voltage                | VRRM     | 80          | V        |
| Reverse Voltage (Continuous)                   | VR       | 75          | V        |
| Average Forward Current                        | IF(AV)   | 150         | mA       |
| Forward Current (DC)                           | IF       | 200         | mA       |
| Repetitive Peak Forward Current                | IFRM     | 450         | mA       |
| Non Repetitive Peak Surge Current              | IFSM     | 2000        | mA       |
|                                                |          | 500         | mA       |
| Power Dissipation                              | PTA      | 500         | mW       |
| Derating Factor                                |          | 2.85        | mW/deg C |
| Operating & Storage Junction Temperature Range | Tj, Tstg | -65 to +200 | deg C    |

### ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

| DESCRIPTION                    | SYMBOL TEST CONDITION |                     | MIN | TYP | MAX | UNIT |
|--------------------------------|-----------------------|---------------------|-----|-----|-----|------|
| Forward Voltage                | VF                    | IF=10mA             | -   | -   | 1.0 | V    |
| Reverse Current                | IR                    | VR=20V              | -   | -   | 500 | nA   |
|                                |                       | VR=75V              | -   | -   | 20  | uA   |
| Reverse Breakdown Voltage      | VBR                   | IR=100uA            | 80  | -   | -   | V    |
|                                |                       | IR=20uA             | 75  | -   | -   | V    |
| <u>DYNAMIC CHARACTERISTICS</u> |                       |                     |     |     |     |      |
| Diode Capacitance              | Cd                    | VR=0V, f=1MHz       | -   | -   | 4.0 | pF   |
| Forward Recovery Voltage       | Vfr                   | IF=50mA, tr=20ns    | -   | -   | 2.5 | V    |
| Reverse Recovery Time          | trr                   | IF=10mA, to IR=60mA | -   | -   | 4.0 | ns   |
|                                |                       | RL=100ohms          |     |     |     |      |
|                                |                       | Measured @ IR=1mA   |     |     |     |      |

## DO-35 Glass Axial Package

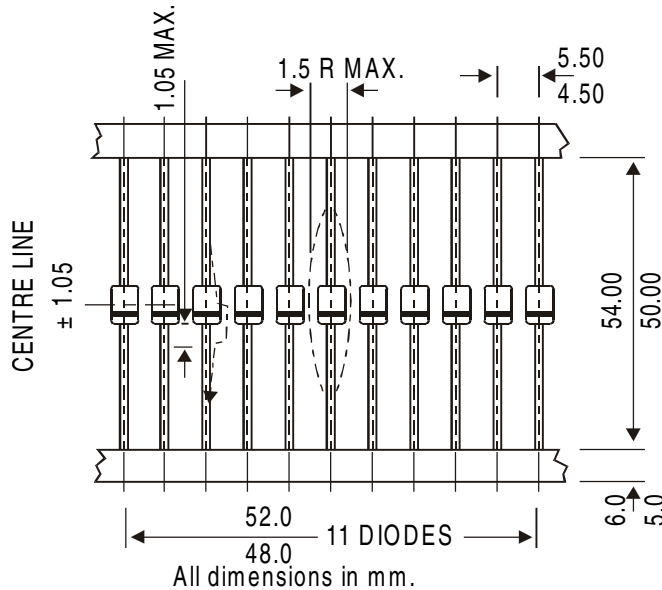


### NOTES

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

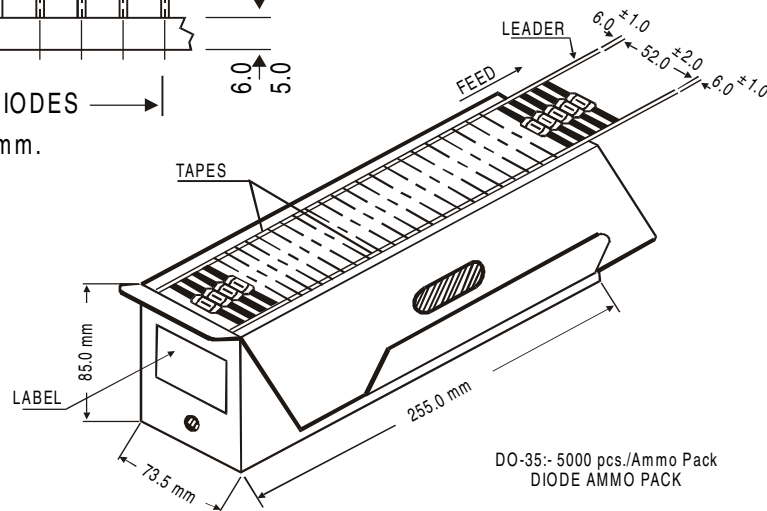
| DIM | MIN   | MAX  |
|-----|-------|------|
| A   | 25.40 | —    |
| B   | 3.03  | 4.44 |
| C   | 0.46  | 0.56 |
| D   | 1.52  | 2.29 |

## 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.



DO-35:- 5000 pcs./Ammo Pack  
DIODE AMMO PACK

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" | 5.0K | 12.7" x 12.7" x 20" | 125.0K | 25 kgs |

## Customer Notes

### Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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 on the CDIL Web Site/CD is 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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