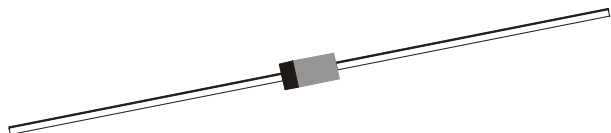


## HIGH SPEED SILICON SWITCHING DIODE

CD4531

DO- 35

Glass Axial Package



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

DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Continuous Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_F (av)$	150	mA
Forward Current (DC)	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non Repetitive Peak Forward Current $t \leq 1 \mu s$ $t \leq 1 s$	$I_{FSM}$	2000	mA
	$I_{FSM}$	500	mA
Power Dissipation up to Tamb=25 °C	$P_{tot}$	500	mW
Operating & Storage Junction Temperature Range	$T_j, T_{stg}$	- 65 to +200	°C

### Thermal Resistance

Junction to Ambient Lead Length 5mm	$R_{th} (j-a)$	350	K/W
Junction to Tie-Point Lead Length 5mm	$R_{th} (j-t)^*$	120	K/W

\*Device mounted on a printed circuit-board without metallization pad.

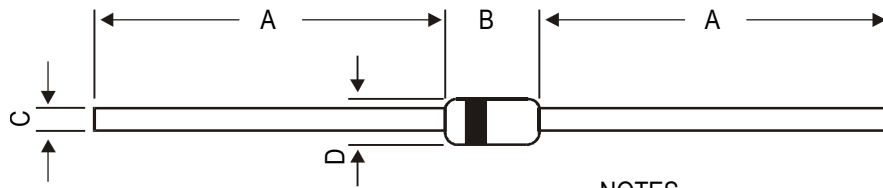
### ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	$V_F$	$I_F=10mA$		1.0	V
Reverse Current	$I_R$	$V_R=20V$		25	nA
		$V_R=20V, T_j=150^\circ C$		50	$\mu A$
		$V_R=75V$		5.0	$\mu A$
Reverse Breakdown Voltage	$V_{BR}$	$I_R=100\mu A$	75		V

### DYNAMIC CHARACTERISTICS

Diode Capacitance	$C_d$	$V_R=0V, f=1MHz$		4.0	pF
Forward Recovery Voltage	$V_{fr}$	$I_F=100mA, t_r \leq 30ns$		3.0	V
Reverse Recovery Time	$t_{rr}$	$I_F=10mA, to I_R=60mA$ $R_L=100 \Omega$ Measured @ $I_R=1mA$		4.0	ns

## DO-35 Hermetically Sealed, Glass Axial Package

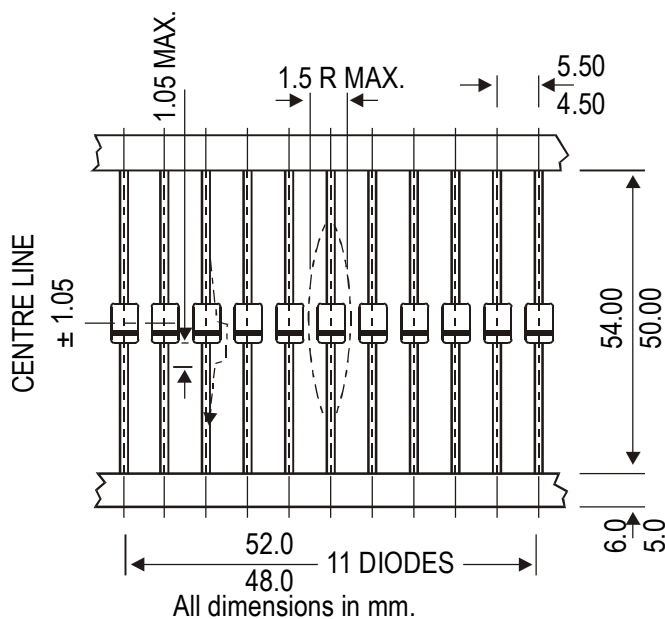


## NOTES

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

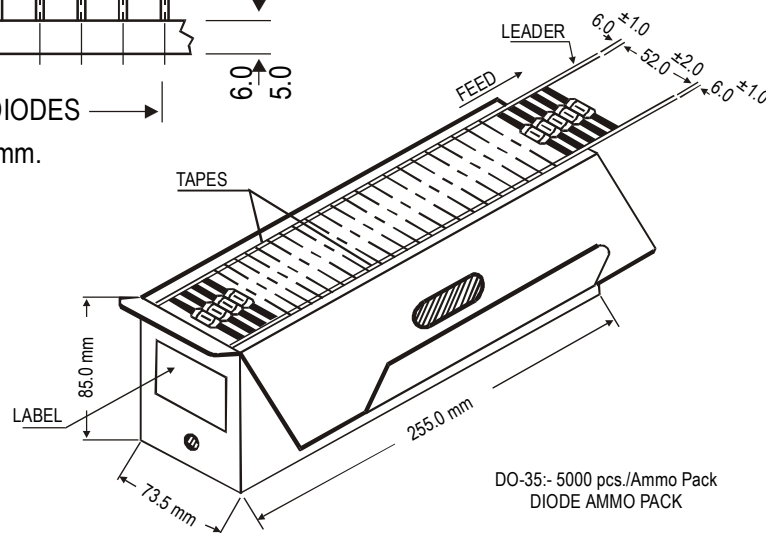
DIM	MIN	MAX
A	25.40	—
B	3.03	4.44
C	0.46	0.56
D	1.52	2.29

## 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.



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

### **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 in the Data Sheet and 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of

**Continental Device India Limited**

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119

email@cdil.com www.cdilsemi.com