

## HIGH SPEED SILICON SWITCHING DIODE AXIAL LEAD

CT 40 TO CT 59  
CT 70 TO CT 79

500mW

DO- 35  
Glass Axial Package

### FEATURES

General Purpose Hermetically Sealed Glass Package Switching Diode

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

DESCRIPTION	SYMBOL	VALUE	UNIT
Average Rectified Current	$I_{F(AV)}$	75	mA
Peak Rectified Current	$I_{FRM}$	200	mA
Power Dissipation At $T_A=25^\circ\text{C}$	$P_{TA}$	500	mW
Derating Factor		2.86	mW/ $^\circ\text{C}$
Operating And Storage Junction Temperature Range	$T_j, T_{stg}$	-65 to +200	$^\circ\text{C}$

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

DEVICE	Peak Inverse Voltage PIV (V)	Min Forward Current $I_F$ @ 1V (mA)	Max Reverse Current $I_R$ @ $V_R$ ( $\mu\text{A}$ )	Reverse Voltage ( $V_R$ ) (V)
CT40	25	10	0.1	20
CT41	40	10	0.1	30
CT42	50	10	0.1	40
CT43	75	10	5.0	50
CT44	100	10	5.0	75
CT45	25	20	0.1	20
CT46	40	20	0.1	30
CT47	50	20	0.1	40
CT48	75	20	5.0	50
CT49	100	20	5.0	75
CT50	25	10	0.1	20
CT51	40	10	0.1	30
CT52	50	10	0.1	40
CT53	75	10	5.0	50
CT54	100	10	5.0	75
CT55	25	20	0.1	20

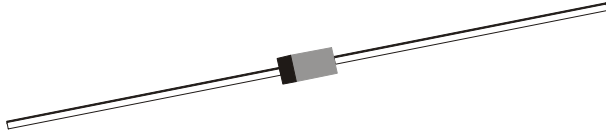
CT40\_59 / CT70\_79 Rev\_1 210103D

# HIGH SPEED SILICON SWITCHING DIODE AXIAL LEAD

CT 40 TO CT 59  
CT 70 TO CT 79

500mW

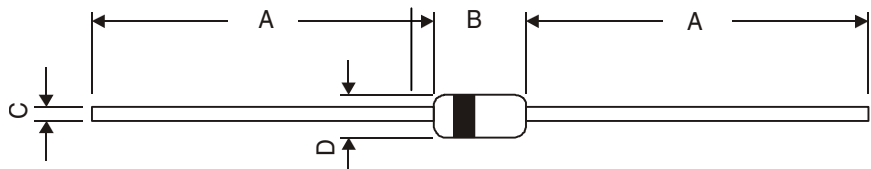
DO- 35  
Glass Axial Package



DEVICE	Peak Inverse Voltage PIV (V)	Min Forward Current $I_F$ @ 1V (mA)	Max Reverse Current $I_R$ @ $V_R$ ( $\mu$ A)	Reverse Voltage ( $V_R$ ) (V)
CT56	40	20	0.1	30
CT57	50	20	0.1	40
CT58	75	20	5.0	50
CT59	100	20	5.0	75
CT70	25	50	0.1	20
CT71	40	50	0.1	30
CT72	50	50	0.1	40
CT73	75	50	5.0	50
CT74	100	50	5.0	75
CT75	25	100	0.1	20
CT76	40	100	0.1	30
CT77	50	100	0.1	40
CT78	75	100	5.0	50
CT79	100	100	5.0	75

DESCRIPTION	SYMBOL	TEST CONDITION	VALUE		UNIT
			MIN	MAX	
Diode Capacitance	$C_d$	$V_R=0$ , $f=1\text{MHz}$ CT 40 TO CT 49 CT 50 TO CT 79		4 2	pF pF
Reverse Recovery Time	$t_{rr}$	$I_R=10\text{mA}$ , $V_R=6\text{V}$ , $R_L=100\Omega$		4	ns

DO-35 Glass Axial Package

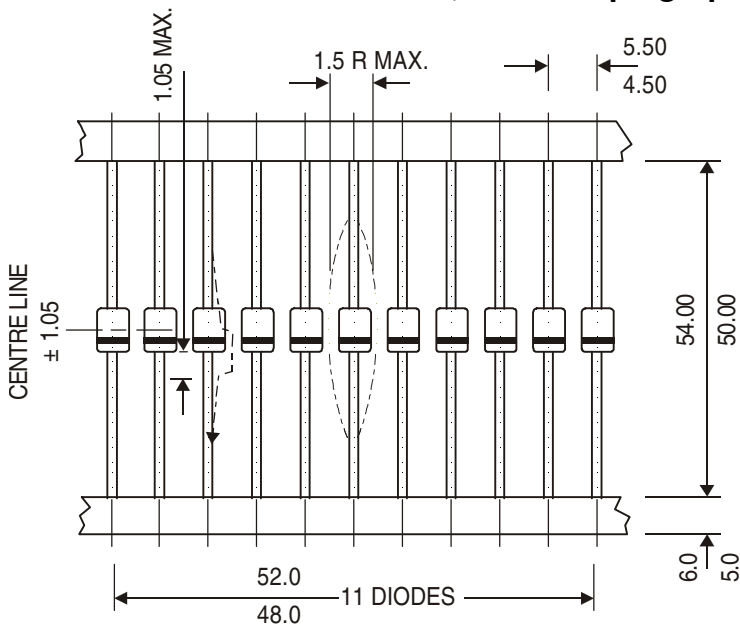


NOTE: Cathode is marked by Band.

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

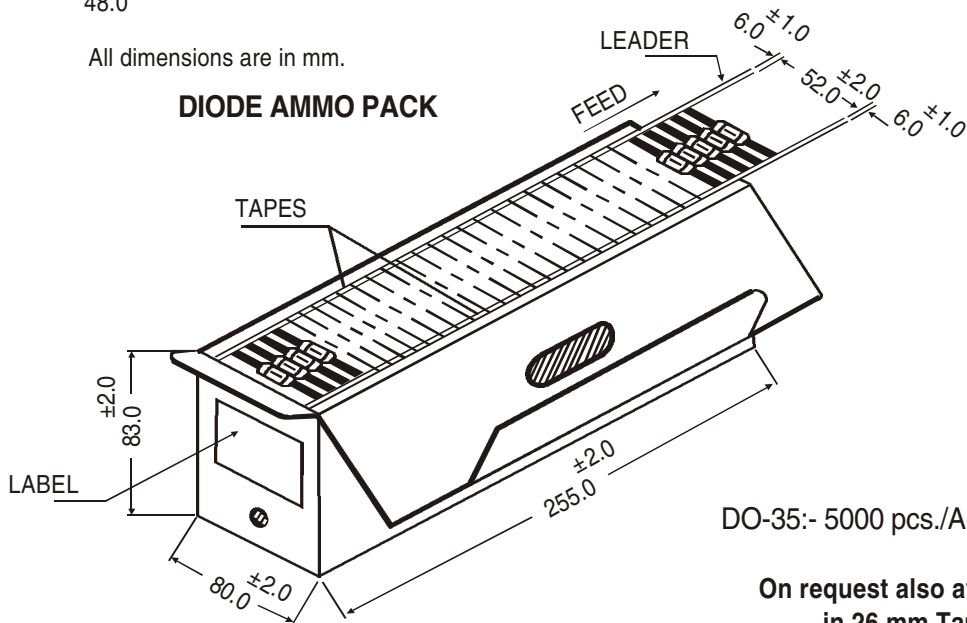


All dimensions are in mm.

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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