

## Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



## 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)

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DESCRIPTION	SYMBOL	VALUE	UNIT			
Average Rectified Current	I <sub>F(AV)</sub>	75	mA			
Peak Rectified Current	$I_{FRM}$	200	mA			
Power Dissipation At T <sub>A</sub> =25°C	$P_TA$	500	mW			
Derating Factor		2.86	mW/°C			
Operating And Storage Junction	$T_{j},T_{stg}$	-65 to +200	°C			
Temperature Range						

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

	· · · · · · · · · · · · · · · · · · ·	a=25°C uniess specified o	uieiwise)	
DEVICE	Peak Inverse	Min Forward	Max Reverse	Reverse
	Voltage	Current	Current	Voltage
	PIV	I <sub>F</sub> @ 1V	$I_R @ V_R$	(V <sub>R</sub> )
	(V)	(mA)	(mA)	(V)
CT40	25	10 ta Sheet 40.0	om 0.1	20 Dat
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

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CT 40 TO CT 59 CT 70 TO CT 79

500mW

DO- 35 Glass Axial Package



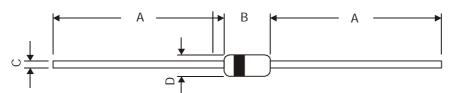
DEVICE	Peak Inverse Voltage PIV (V)	Min Forward Current I <sub>F</sub> @ 1V (mA)	Max Reverse Current I <sub>R</sub> @ V <sub>R</sub> (mA)	Reverse Voltage (V <sub>R</sub> ) (V)
CT56	40	20	0.1	30
CT57	50	20	0.1	40
CT58	75	20	5.0	50
CT59	100	20	5.0	75
CT70	25	50	0.1	20
CT71	40	50	0.1	30
CT72	50	50	0.1	40
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	Data TEST CONDITION	V	VALUE		ataS
			MIN	MAX	]	
Diode Capacitance	C <sub>d</sub>	V <sub>R</sub> =0, f=1MHz CT 40 TO CT 49		4	pF	
		CT 50 TO CT 79		2	pF	
Reverse Recovery Time	t <sub>rr</sub>	$I_R = 10 \text{mA}, V_R = 6 \text{V},$		4	ns	
		$R_1 = 100\Omega$				

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# **DO-35 Glass Axial Package**



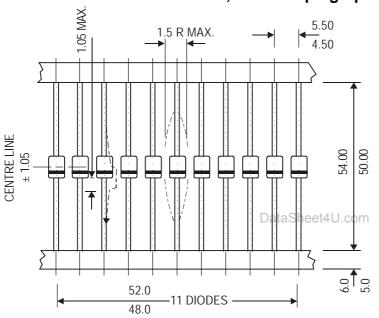
A	25.40	
В	3.05	4.15
С	0.46	0.56
D	1.70	2.29

NOTE: Cathode is marked by Band.

All dimensions are in mm.

DIM MIN MAX

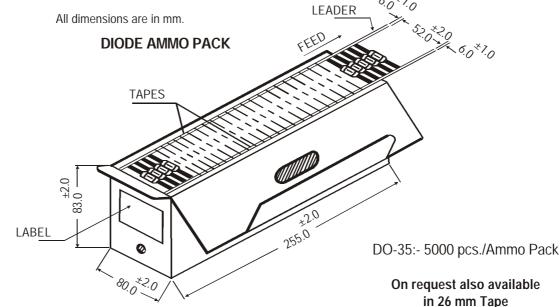
# DO-35, 52mm Taping Specification



# 52 mm Taping Specification

- 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.
- Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

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## **Packing Detail**

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	PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX			
		Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt	
he	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	DataShee 25 kgs	t4L

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CT 70 TO CT 79

#### **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**

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#### **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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