



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

## HIGH SPEED SILICON SWITCHING DIODE



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 <sub>F</sub> (av)	150	mA
Forward Current (DC)	I <sub>F</sub>	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non Repetitive Peak Forward Current t≤1 μs	I <sub>FSM</sub>	2000	mA
t <u>&lt;</u> 1 s	I <sub>FSM</sub>	500	mA
Power Dissipation up to Tamb=25 °C	P <sub>tot</sub>	500	mW
Operating & Storage Junction Temperature	$T_{j},T_{stg}$	- 65 to +200	°C
Range	. •		

### **Thermal Resistance**

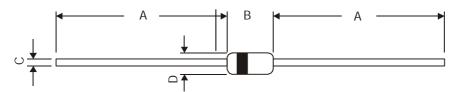
Junction to Ambient Lead Length 5mm	R <sub>th</sub> (j-a)	350	K/W
Junction to Tie-Point Lead Length 5mm	R <sub>th</sub> (j-t)*	120	K/W

<sup>\*</sup>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 <sub>F</sub> =10mA		1.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
		V <sub>R</sub> =20V, T <sub>i</sub> =150° C		50	μΑ
		V <sub>R</sub> =75V		5.0	μΑ
Reverse Breakdown Voltage	$V_{BR}$	I <sub>R</sub> =100μA	75		V
DYNAMIC CHARACTERISTICS					
Diode Capacitance	$C_d$	V <sub>R</sub> =0V, f=1MHz		4.0	pF
Forward Recovery Voltage	$V_{fr}$	I <sub>F</sub> =100mA, t <sub>r</sub> ≤ 30ns		3.0	V
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =10mA, to I <sub>R</sub> =60mA		4.0	ns
		R <sub>L</sub> =100 Ω			
		Measured @ I <sub>R</sub> =1mA			

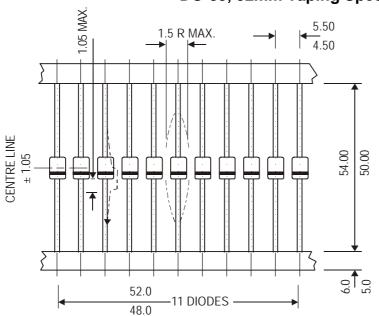
# **DO-35 Glass Axial Package**



DIM	MIN	MAX
Α	25.40	
В	3.05	4.15
С	0.46	0.56
D	1.70	2.29

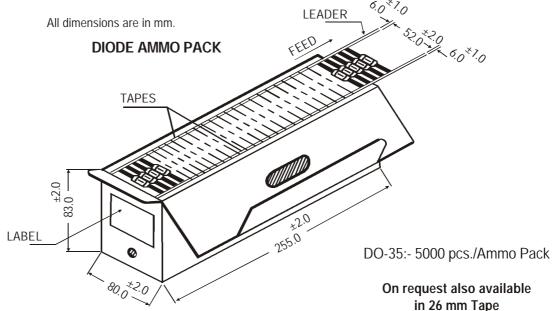
All dimensions are in mm.

# 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.



# **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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