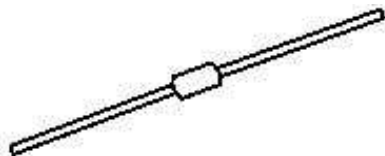


**SILICON DIAC
BIDIRECTIONAL TRIGGER DIODE
GLASS PASSIVATED PNP DEVICE**



**DIAC
DB3-22**

**DO-35
Glass Axial Package**

**Marking
C
DB3
-22**

APPLICATIONS

For Triggering TRIACs, SCRs, Industrial and Commercial Equipments, Lamp Dimmer Circuits, Universal Motor Speed Controls, Heat Controls.

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Power Dissipation on Printed Circuit	P_{tot}	$L=10\text{mm}$, $T_a=50^\circ\text{C}$			150	mW
Repetitive Peak On- State Current	I_{TRM}	$t_p=20\mu\text{s}$, $f=120\text{Hz}$ repetition			2	A
Operating and Storage Temperature	T_j, T_{stg}		-40		125	$^\circ\text{C}$
Soldering Temperature	T_{sld}	1.6mm from case, 10s max			250	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Break Over Voltage	V_{BO}	$T_C=-40$ to 125°C	28	32	36	V
* Break Over Voltage Symmetry	$ V_{\text{BO1}}-V_{\text{BO2}} $	$T_j=125^\circ\text{C}$			± 3.0	V
* Break Over Current	I_{BO}	$T_j=125^\circ\text{C}$			100	μA
* Peak Output Voltage	V_P		5.0			V
* Rise Time	t_r			1.5		μs
* Leakage Current	I_B	$V_B=0.5 V_{\text{BOmax}}$			10	μA
* Peak Current	I_P		0.3			A

* Electrical characteristics applicable in both forward and reverse directions

DIAGRAM 1 :Current-voltage characteristics

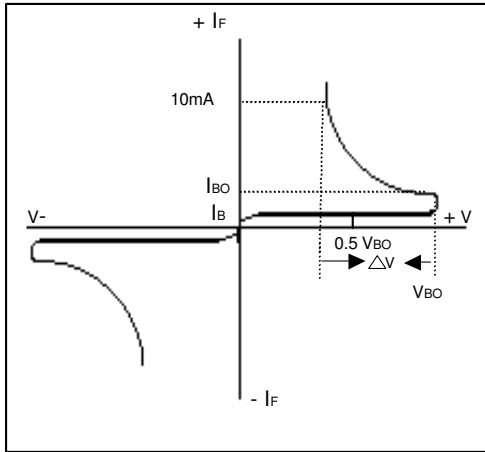


DIAGRAM 2 :Test circuit for output voltage

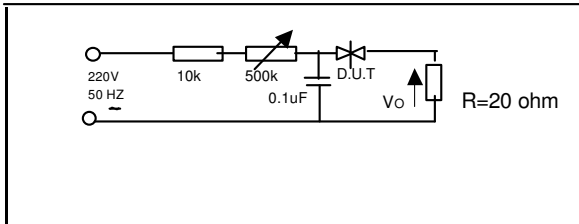
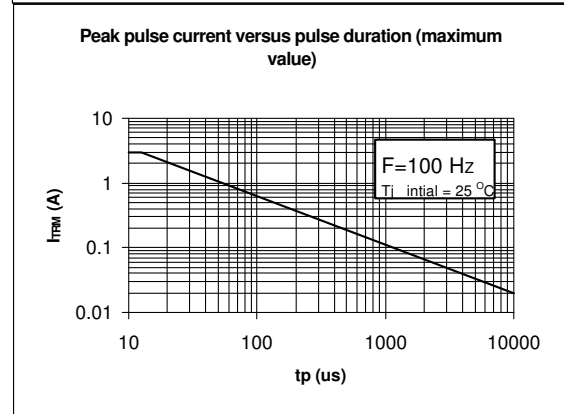
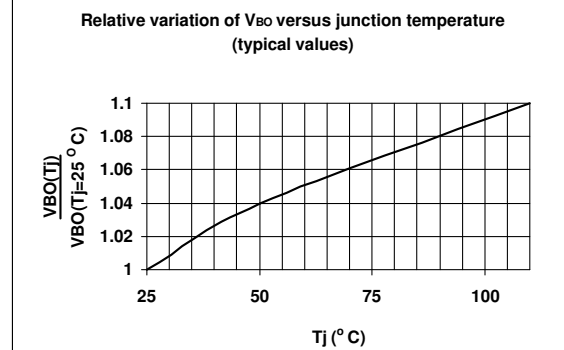
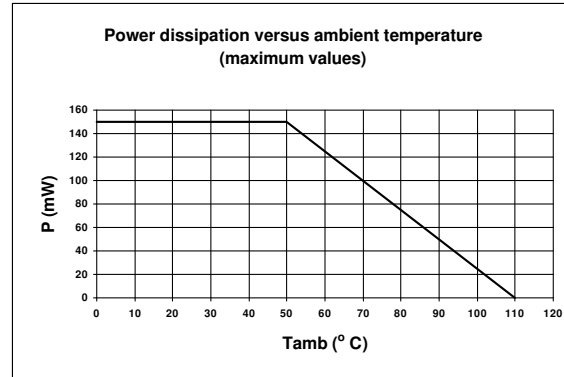
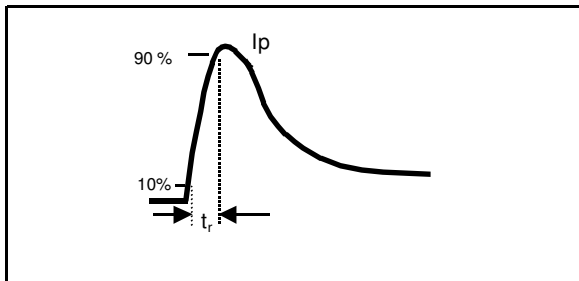
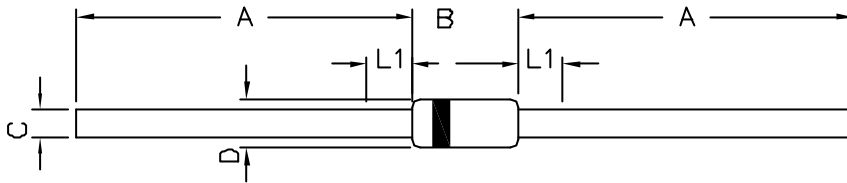


DIAGRAM 3 : Test circuit see diagram 2.
Adjust R for $I_p=0.5A$



DO-35 Glass Axial Package

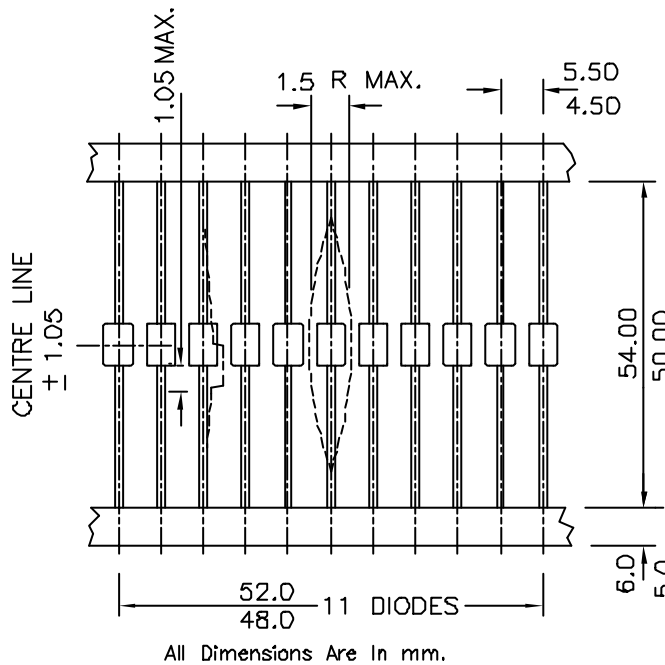


NOTES:-

Cathode is marked by Band.
All Dimensions Are In mm.

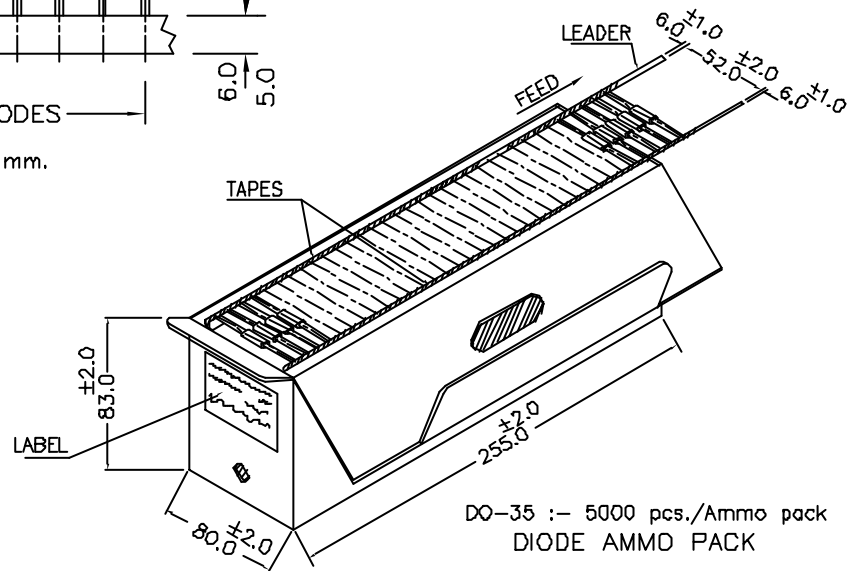
DIM	MIN	MAX
A	25.40	38.10
B	3.05	5.08
C	0.46	0.55
D	1.53	2.28
L1	—	1.27

DO-35, 52mm Taping Specification



52mm Taping Specification

1. T & A Indicates Axial Tape & Ammo packing (52 mm Tape Specing)
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.



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	Qty
DO-35 T&A	5K/ammo box	0.88kg/5K pcs	10"X3.5"X3.5"	5.0K	12.7"X12.7"X20"	125.0K	25Kgs

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 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, 4141 1112 Fax + 91-11-2579 5290, 4141 1119
email@cdil.com www.cdilsemi.com