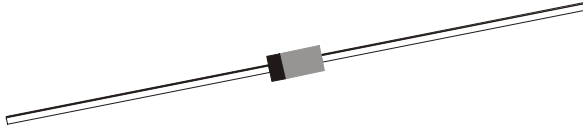


## SCHOTTKY BARRIER RECTIFIER

**BAT85**

**DO-35**

**Glass Axial Package**



For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

**ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless specified otherwise)

Single phase, half wave, resistive or inductive load. For capacitive load, derate current by 20%.

DESCRIPTION	SYMBOL	VALUE	UNIT
Repetative Peak Reverse Voltage	$V_R$	30	V
Forward continuous Current at $T_A = 25^\circ\text{C}$	$I_F$	200 <sup>(1)</sup>	mA
Repetative Peak Forward Current at $T_A = 25^\circ\text{C}$	$I_{FM}$	300 <sup>(1)</sup>	mA
Surge forward current at $t_p < 10\text{ns}$ $T_A = 25^\circ\text{C}$	$I_{FSM}$	600 <sup>(1)</sup>	mA
Power Dissipation at $T_A = 65^\circ\text{C}$	$P_{tot}$	200 <sup>(1)</sup>	mW
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Ambient Operating Temperature Range	$T_A$	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-65 to +150	$^\circ\text{C}$

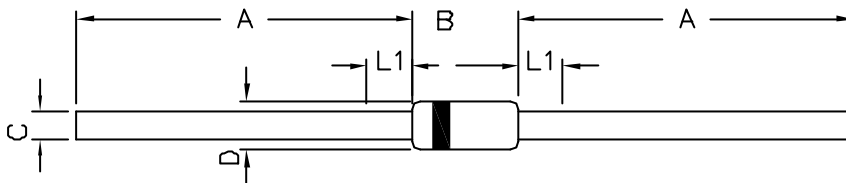
(1) Valid, provided that leads at a distance of 4mm from case are kept at ambient temp.

### ELECTRICAL CHARACTERSTICS

	Symbol	Min.	Typ.	Max	Units
Reverse breakdown voltage tested with 100 $\mu\text{A}$ pulses	$V_{(BR)}R$	30			V
Forward Voltage Pulse test $t_p < 300\mu\text{s}$ at $I_F = 0.1\text{mA}$	$V_F$			0.24	V
at $I_F = 1\text{mA}$	$V_F$			0.32	V
at $I_F = 10\text{mA}$	$V_F$			0.40	V
at $I_F = 30\text{mA}$	$V_F$		0.50		V
at $I_F = 100\text{mA}$	$V_F$			0.80	V
Leakage current $V_R = 25\text{V}$	$I_R$			2	$\mu\text{A}$
Junction Capacitance at $V_R = 1\text{V}$ , $f = 1\text{MHz}$	$C_j$			10	pF
Reverse recovery time from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$ to $I_R = 1\text{mA}$	$t_{rr}$			5	ns
Thermal resistance junction to ambient Air	$R_{\theta JA}$			300 <sup>(1)</sup>	K/W

(1) Valid, provided that leads at a distance of 4mm from case are kept at ambient temperature.

DO-35 Glass Axial Package

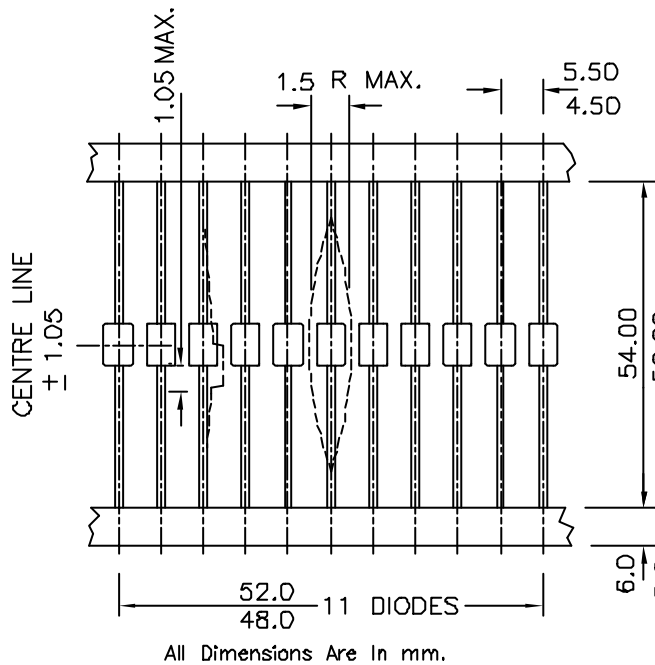


DIM	MIN	MAX
A	25.40	38.10
B	3.05	5.08
C	0.46	0.55
D	1.53	2.28
L1	-	1.27

NOTES:-

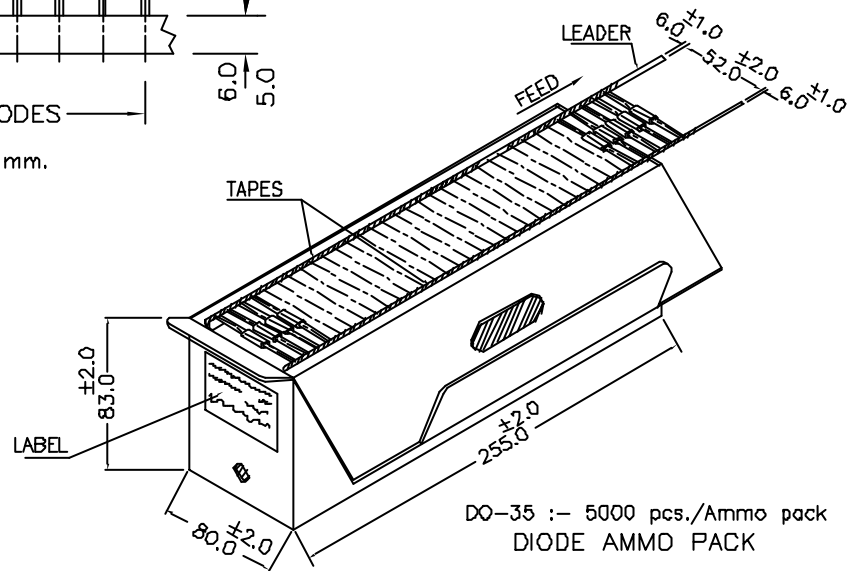
Cathode is marked by Band.  
All Dimensions Are In mm.

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

**BAT85**

**DO-35**

**Glass Axial Package**

### **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).

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