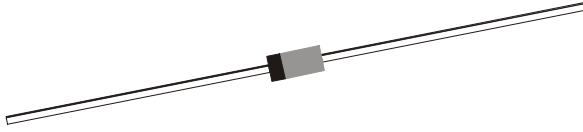


SCHOTTKY BARRIER RECTIFIER

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 ⁽¹⁾	mA
Repetative Peak Forward Current at $T_A = 25^\circ\text{C}$	I_{FM}	300 ⁽¹⁾	mA
Surge forward current at $t_p < 10\text{ns}$ $T_A = 25^\circ\text{C}$	I_{FSM}	600 ⁽¹⁾	mA
Power Dissipation at $T_A = 65^\circ\text{C}$	P_{tot}	200 ⁽¹⁾	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 CHARACTERISTICS

	Symbol	Min.	Typ.	Max	Units
Reverse breakdown voltage tested with 100 μA 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	μA
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 ⁽¹⁾	K/W

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

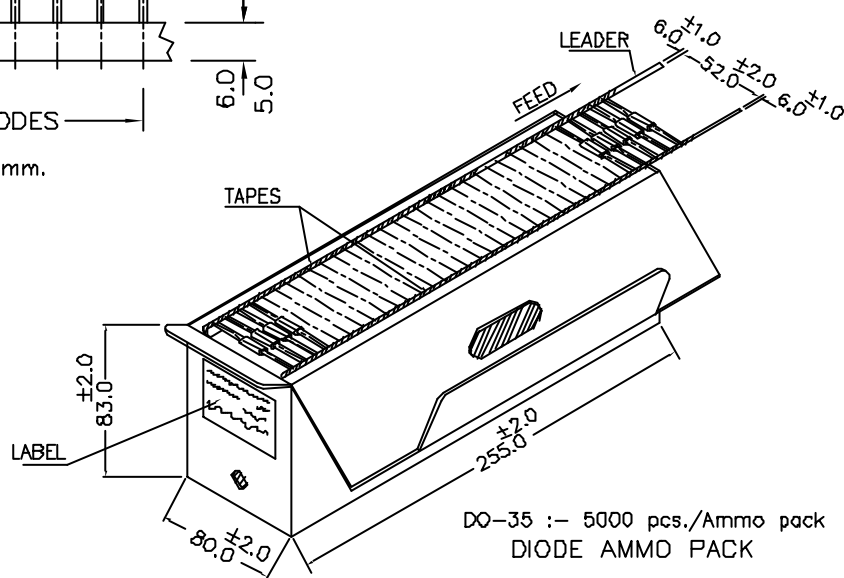
Diagram illustrating the geometry of a beam with a central rectangular hole. The beam has a total width C and a central hole of width D . The distance from the left edge to the start of the hole is A , and the distance from the end of the hole to the right edge is also A . The hole has a height $L1$.

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

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

Technical drawing of a 11 diode array package. The drawing shows a top view of the package with 11 diodes arranged in a single row. The package has a central line and a width of 50.00 mm. The diodes are spaced 52.0 mm apart, with a total width of 48.0 mm for the diode array. The package has a height of 54.00 mm. The drawing includes dimensions for the diode array, the package body, and the diode spacing. The text "CENTRE LINE + 1.05" is shown on the left. The text "11 DIODES" is shown at the bottom. The text "All Dimensions Are In mm." is shown at the bottom.

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.



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

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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 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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