Continental Device India Limited

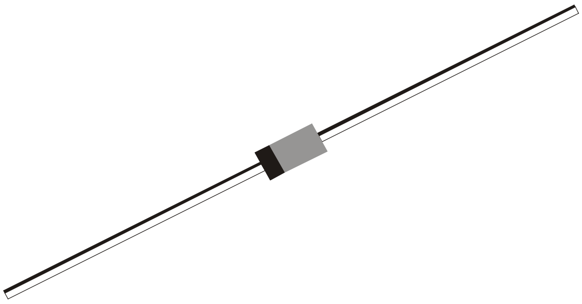
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

ISO 14001

SILICON GLASS PASSIVATED 2.0 WATT ZENER DIODES

ZY7.5V to ZY47V

DO- 41
Glass Axial Package



For use in Stabilizing and Clipping Circuits with High Power Rating

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation @ T_a=25ºC	*P_D	2	W
Junction Temperature	T_j	150	ºC
Storage Temperature Range	T_{stg}	- 55 to+150	ºC

THERMAL RESISTANCE

Junction to ambient in free air	*$R_{th\ (j-a)}$	60	K/W

***Valid provided that leads are kept at ambient temperature at a distance of 10mm from case**

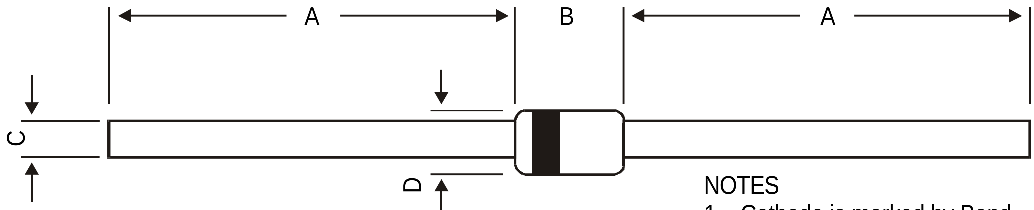
ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise) V_F <1.1V @ 1A

Device #	**Zener Voltage @ I_{ZT} min V_Z (V)	max	Dynamic Resistance @ I_{ZT} f=1KHz (max) r_{zj} (W)	Temp . Coeff of Zener Voltage @ I_Z test a V_Z10 $^{-4/K}$	Test Current @ I_Z test I_{ZT} (mA)	Reverse Voltage @ I_R = 1 mA V_R (V)	***Admissible Zener Current @ T_a=45ºC I_Z (mA)
ZY7.5	7.0	7.9	2	-0……+7	100	>2.0	200
ZY8.2	7.7	8.7	2	+3……+8	100	>3.5	180
ZY9.1	8.5	9.6	4	+3……+8	50	>7.4	165
ZY10	9.4	10.6	4	+5……+9	50	>8.2	145
ZY11	10.4	11.6	7	+5……+10	50	>9.2	135
ZY12	11.4	12.7	7	+5……+10	50	>10	120
ZY13	12.4	14.1	10	+5……+10	50	>10.7	110
ZY15	13.8	15.8	10	+5……+10	50	>12	98
ZY16	15.3	17.1	15	+6……+11	25	>13.3	90
ZY18	16.8	19.1	15	+6……+11	25	>14.7	80
ZY20	18.8	21.2	15	+6……+11	25	>16.5	72
ZY22	20.8	23.3	15	+6……+11	25	>18.3	66
ZY24	22.8	25.6	15	+6……+11	25	>20.1	60
ZY27	25.1	28.9	15	+6……+11	25	>22.5	53
ZY30	28	32	15	+6……+11	25	>25.1	48
ZY33	31	35	15	+6……+11	25	>27.8	4
ZY36	34	38	40	+6……+11	10	>30.2	40
ZY39	37	41	40	+6……+11	10	>32.9	37
ZY43	40	46	45	+7……+12	10	>35.6	33
ZY47	44	50	45	+7……+12	10	>39.2	30

****Tested with Pulse t_p=5ms**
***** Valid provided that leads are kept at ambient temperature at a distance of 10mm from case**

ZY7.5_47V Rev _2 050604E

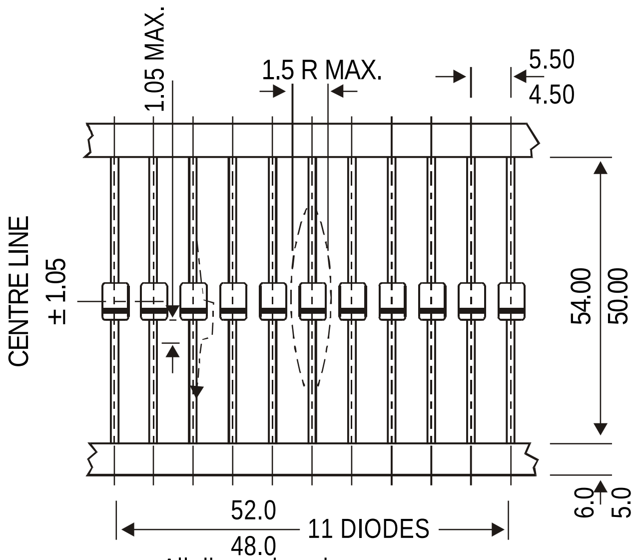
DO- 41 Glass Axial Package



NOTES
1. Cathode is marked by Band.
2. All dimensions are in mm.

DIM	MIN	MAX
A	27.90	—
B	4.06	5.51
C	0.71	0.87
D	2.03	2.72

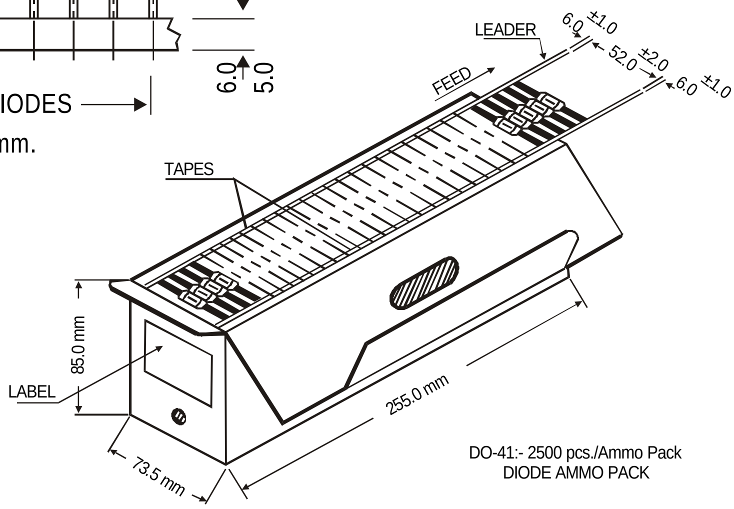
DO-41, 52mm Taping Specification



All dimensions in mm.

52 mm Taping Specification

1. T & A indicates Axil Tape & Ammo packing (52 mm Tape Spacing).
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.



DO-41:- 2500 pcs./Ammo Pack
DIODE AMMO PACK

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	Gr Wt
DO-41 T&A	2.5K/ammo box	1.04 kg/2.5K pcs	10" x 3.5" x 3.5"	2.5K	12.7" x 12.7" x 20"	62.5K	30 kgs

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Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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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