

Continental Device India Limited

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

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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 =25°C	*P _D	2	W	
Junction Temperature	Tj	150	٥C	
Storage Temperature Range	T _{stg}	- 55 to+150	°C	

THERMAL RESISTANCE

Junction to ambient in free air	*R _{th (i-a)}	60	K/W
	ui (j-a)		

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

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

Device #	-		Dynamic Resistance	Temp . Coeff	Test	Reverse	***Admissible	
	@	I _{ZT}	@ I _{ZT}	of Zener Voltage	Current	Voltage	Zener Current @ T _a =45°C	
			f=1KHz	@ Iz test	@ Iz test	@ I _{R =} 1 mA		
	min	max	(max)					
V _z (V)		r _{zj} (W)	a V _z 10 ^{-4/K}	I _{ZT} (mA)	V _R (V)	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 tp=5ms

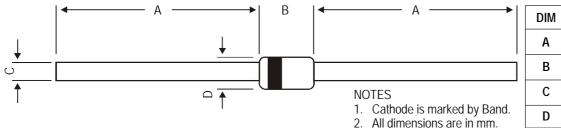
*** Valid provided that leads are kept at ambient temperature at a distance of 10mm from case

ZY7.5_47V Rev _2 050604E

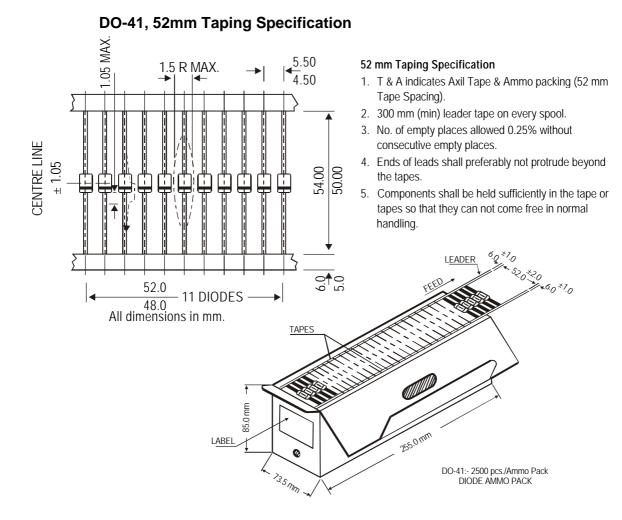
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DIM	MIN	MAX
Α	27.90	-
В	4.06	5.51
С	0.71	0.87
D	2.03	2.72



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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Customer Notes

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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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