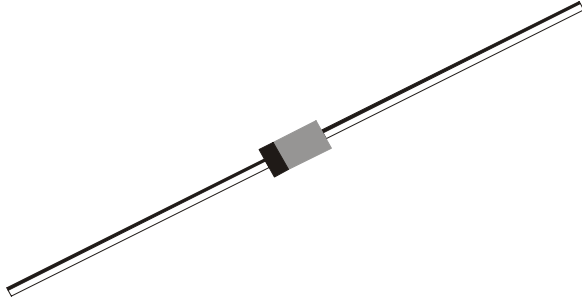


SILICON GLASS PASSIVATED 1.3 WATT ZENER DIODES

BZX85C4V7-100V

DO-41
Glass Axial Package



DESCRIPTION

1.3W Hermetically Sealed Glass Silicon Zener Diodes

ABSOLUTE MAXIMUM RATINGS ($T_a = ^\circ\text{C}$)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation	$*P_D$	1.3	W
Operating and Storage Temperature Range	T_{stg}, T_J	- 55 to +175	$^\circ\text{C}$
Maximum Lead Temperature for Soldering during 10s @ 4mm from Case	T_L	230	$^\circ\text{C}$

THERMAL RESISTANCE

Junction to Ambient in free air	$*R_{th(j-a)}$	110	$^\circ\text{C/W}$
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*On infinite heatsink with 4mm lead length

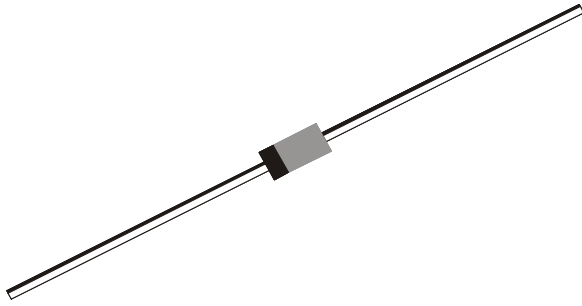
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$ $V_F < 1.0\text{V}$ @ 200mA)

Device	$**V_{ZT} / I_{ZT}$		r_{zt} / I_{ZT}	I_{ZT}	r_{zk} / I_{ZK}		aVZ		I_R	I_R	V_R	I_{ZM}	$***I_{ZSM}$
	MIN	MAX	MAX		MAX		MIN	MAX	@ 25 $^\circ\text{C}$ Max	@ 150 $^\circ\text{C}$ Max			
	(V)		(W)	(mA)	(W)	(mA)	(10 $^{-4}$ / $^\circ\text{C}$)		(mA)	(mA)	(V)	(mA)	(mA)
BZX85C4V7	4.4	5.0	13	45	500	1.00	-3	4	3	10	1.0	215	1667
BZX85C5V1	4.8	5.4	10	45	500	1.00	-1	4	1	10	1.5	200	1543
BZX85C5V6	5.2	6.0	7	45	400	1.00	0	4.5	1	10	2.0	190	1389
BZX85C6V2	5.8	6.6	4	35	300	1.00	1	5.5	1	10	3.0	170	1263
BZX85C6V8	6.4	7.2	3.5	35	300	1.00	1.5	6	1	10	4.0	155	1157
BZX85C7V5	7.0	7.9	3	35	200	0.50	2	6.5	1	10	4.5	140	1055
BZX85C8V2	7.7	8.7	5	25	200	0.50	3	7	1	10	6.2	130	958
BZX85C9V1	8.5	9.6	5	25	200	0.50	3.5	7.5	1	10	6.8	120	868
BZX85C10	9.4	10.6	7	25	200	0.50	4	8	0.5	10	7.5	105	786
BZX85C11	10.4	11.6	8	20	300	0.50	4.5	8	0.5	10	8.2	97	718
BZX85C12	11.4	12.7	9	20	350	0.50	4.5	8.5	0.5	10	9.1	88	656
BZX85C13	12.4	14.1	10	20	400	0.50	5	8.5	0.5	10	10	79	591
BZX85C15	13.8	15.6	15	15	500	0.50	5.5	9	0.5	10	11	71	534
BZX85C16	15.3	17.1	15	15	500	0.50	5.5	9	0.5	10	12	66	487
BZX85C18	16.8	19.1	20	15	500	0.50	6	9	0.5	10	13	62	436
BZX85C20	18.8	21.2	24	10	600	0.50	6	9	0.5	10	15	56	393
BZX85C22	20.8	23.2	25	10	600	0.50	6	9.5	0.5	10	16	52	358
BZX85C24	22.8	25.6	25	10	600	0.50	6	9.5	0.5	10	18	47	326
BZX85C27	25.1	28.9	30	8	750	0.25	6	9.5	0.5	10	20	41	288
BZX85C30	28.0	32.0	30	8	1000	0.25	6	9.5	0.5	10	22	36	260

** Pulse Condition : 20ms $\leq t_p \leq$ 50ms

*** Rectangle wave form ($t_p=10\text{ms}$)

BZX85C4V7_100V Rev_1 110904E

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ $V_F < 1.0\text{V}$ @ 200mA)

Device	**V_{ZT} / I_{ZT}		r_{zt} / I_{ZT}	I_{ZT}	r_{ZK} / I_{ZK}		a VZ		I_R @ 25°C	I_R @ 150°C	V_R	I_{ZM}	***I_{ZSM}
	MIN	MAX											
	(V)		(W)	(mA)	(W)	(mA)	(10 ⁻⁴ /°C)	(mA)	(mA)	(V)	(mA)	(mA)	
BZX85C33	31	35	35	8	1000	0.25	6	9.5	0.5	10	24	33	238
BZX85C36	34	38	40	8	1000	0.25	6	9.5	0.5	10	27	30	219
BZX85C39	37	41	50	6	1000	0.25	6	9.5	0.5	10	30	28	203
BZX85C43	40	46	50	6	1000	0.25	6	9.5	0.5	10	33	26	181
BZX85C47	44	50	90	4	1500	0.25	6	9.5	0.5	10	36	23	167
BZX85C51	48	54	115	4	1500	0.25	6	9.5	0.5	10	39	21	154
BZX85C56	52	60	120	4	2000	0.25	6	9.5	0.5	10	43	19	139
BZX85C62	58	66	125	4	2000	0.25	6	9.5	0.5	10	47	16	126
BZX85C68	64	72	130	4	2000	0.25	6	9.5	0.5	10	51	15	116
BZX85C75	70	80	135	4	2000	0.25	6	9.5	0.5	10	56	14	104
BZX85C82	77	87	200	2.7	3000	0.25	7	12	0.5	10	62	12	96
BZX85C91	85	96	250	2.7	3000	0.25	7	12	0.5	10	68	10	87
BZX85C100	94	106	350	2.7	3000	0.25	7	12	0.5	10	75	9.4	79

** Pulse Condition : 20ms ≤ t_p ≤ 50ms*** Rectangle wave form (t_p=10ms)

A schematic diagram of a beam of total length $2A$. The beam is divided into two equal segments of length A by a central joint labeled B . A central load C is applied downwards at the joint B . The distance from the left end of the beam to the joint is A , and the distance from the joint to the right end is also A . The beam has a constant thickness D . The joint B is represented by a vertical line with a small gap, and the load C is represented by a downward arrow at the center.

DIM	MIN	MAX
A	25.40	—
B	—	5.20
C	0.72	0.86
D	2.04	2.71
L1	—	1.27

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

1.05 MAX.

1.5 R MAX.

5.50
4.50

CENTRE LINE
± 1.05

54.00
50.00

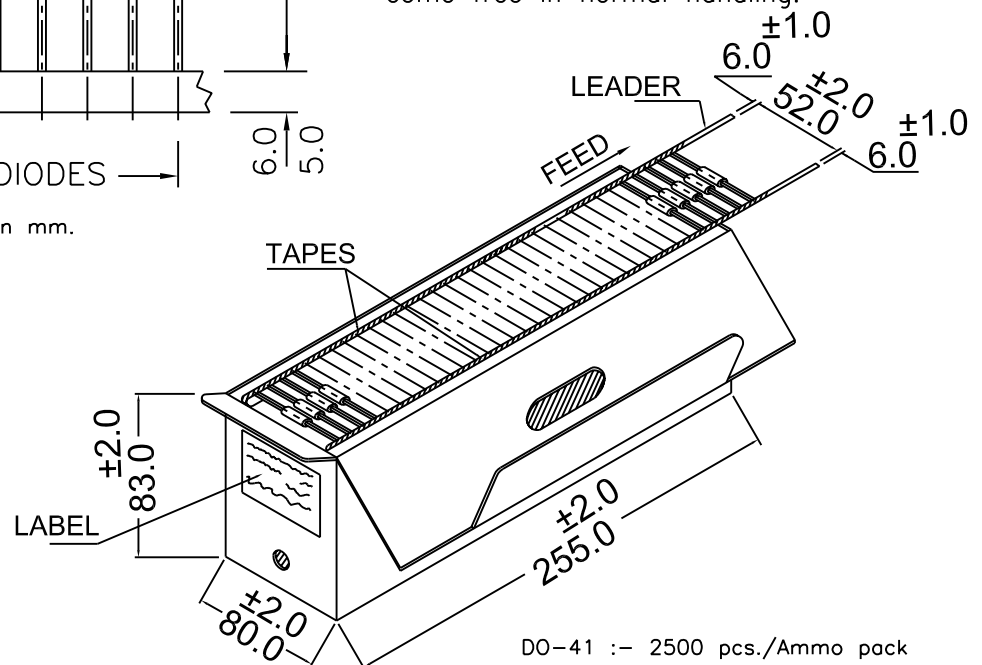
52.0
48.0

11 DIODES

6.0
5.0

All Dimensions Are In mm.

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.



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

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Qty
DO-41 T&A	2.5K/ammo box	1.04kg/2.55K pcs	10"X3.5"X3.5"	2.5K	12.7"X12.7"X20"	62.5K	30Kgs

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 is 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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