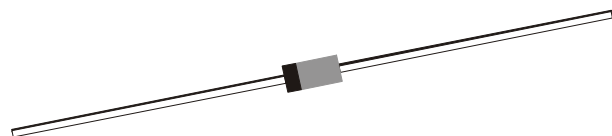


HIGH SPEED SILICON SWITCHING DIODE AXIAL LEAD

CTZ 2.6 to 47
500mW

DO- 35
Glass Axial Package



FEATURES

These Zeners Are Best Suited For Industrial Purpose , Military & Space applications.
Hermetically Sealed Glass With Double Stud And Glass Passivated Chip Provides Excellent Stability and Reliability.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation @Ta=25°C	P _{TA}	500	mW
Surge Power Dissipation tp=8.3mS	P _S	5	W
Junction Temperature	T _J	175	°C
Storage Temperature	T _{stg}	-65 to+175	°C

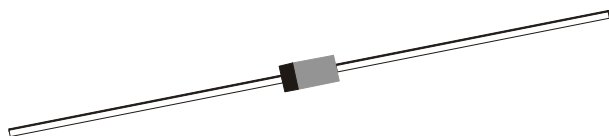
ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	VALUE	UNIT
Thermal Resistance Junction Ambient	R _{th(j-a)}	0.3	°C/mW
Forward Voltage at I _F =200mA	V _F	1.5	V

ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DEVICE	V _{ZT} @ I _{ZT} *	r _{ZT} @ I _{ZT} * MAX	I _{ZT} (mA)	r _{ZK} @ I _{ZK} * MAX	I _{ZK} (mA)	Temp. Coeff.of Zener Voltage typ (%/°C)	I _R @ V _R (μA)	V _R (V)	I _{ZM} MAX (mA)	I _{ZSM} MAX (mA)
CTZ2.6	2.6	30	20	600	1	-0.085	75	1	147.8	
CTZ2.7	2.7	30	20	600	1	-0.085	75	1	168.3	
CTZ3.0	3.0	48	20	600	1	-0.075	20	1	148.5	1500
CTZ 3.3	3.3	44	20	600	1	-0.070	10	1	135	1375
CTZ 3.6	3.6	42	20	600	1	-0.065	5	1	126	1260
CTZ3.9	3.9	40	20	600	1	-0.060	5	1	115	1165
CTZ 4.3	4.3	36	20	600	1	-0.055	0.5	1	105	1060
CTZ 4.7	4.7	32	20	600	1	-0.043	10	2	95	965
CTZ 5.1	5.1	28	20	550	1	+/-0.030	5	2	87	890
CTZ 5.6	5.6	16	20	450	1	+/-0.028	10	3	80	810
CTZ 6.2	6.2	6	210	200	1	+0.045	10	4	72	730
CTZ 6.8	6.8	6	20	150	1	+0.050	5	5	65	665

CTZ2.6_47Rev081001

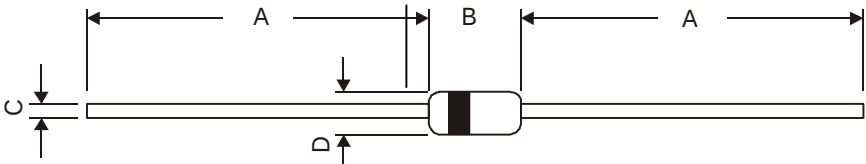


DEVICE	$V_{ZT} @$ $I_{ZT} *$	$r_{ZT} @$ $I_{ZT} *$ MAX	I_{ZT}	$r_{ZK} @$ $I_{ZK} *$ MAX	I_{ZK}	Temp. Coeff.of Zener Voltage typ	$I_R @$ V_R	V_R	I_{ZM} MAX	I_{ZSM} MAX
	(V)	(Ω)	(mA)	(Ω)	(mA)	(%/°C)	(μ A)	(V)	(mA)	(mA)
CTZ 7.5	7.5	8	10	50	1	+0.058	1.0	6	60	605
CTZ 8.2	8.2	10	10	50	1	+0.062	0.52	7	55	555
CTZ9.1	9.1	12	10	50	1	+0.068	0.1	7	49	500
CTZ 10	10	14	10	70	1	+0.075	0.1	8	45	455
CTZ 11	11	15	10	700	0.25	+0.073	0.1	9	41	410
CTZ 12	12	19	10	700	0.25	0.076	0.1	10	37	380
CTZ 13	13	23	5	700	0.25	+0.079	0.1	11	35	350
CTZ 15	15	27	5	700	0.25	+0.082	0.1	13	30	300
CTZ 16	16	31	5	700	0.25	+0.083	0.1	14	28	285
CTZ 18	18	35	5	750	0.25	+0.085	0.1	16	25	250
CTZ 20	20	39	5	750	0.25	+0.086	0.1	18	22	225
CTZ 22	22	67	5	750	0.25	+0.087	0.1	19	20	205
CTZ 24	24	75	5	750	0.25	+0.088	0.1	20	18.6	190
CTZ27	27	77	5	750	0.25	+0.090	0.1	22	16.5	170
CTZ30	30	93	5	1000	0.25	+0.091	0.1	24	15	150
CTZ33	33	96	5	1000	0.25	+0.092	0.1	26	13.5	135
CTZ36	36	146	5	1000	0.25	+0.093	0.1	28	12.4	125
CTZ39	39	192	5	1000	0.25	+0.094	0.1	30	11.4	115
CTZ43	43	246	5	1500	0.25	+0.095	0.1	35	10.4	105
CTZ 47	47	286	5	1500	0.25	+0.095	0.1	42	9.5	95

Available in $\pm 10\%$ Tolerance. Add Suffix "A" for $\pm 5\%$ Tolerance

* Pulse Condition : 20ms < 50ms, Duty Cycle <2%

DO-35 Glass Axial Package

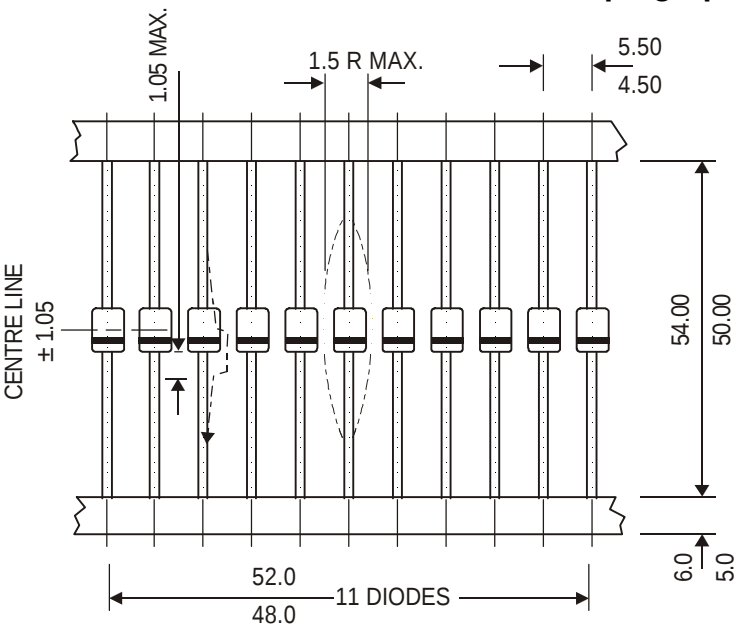


NOTE: Cathode is marked by Band.

DIM	MIN	MAX
A	25.40	—
B	3.05	4.15
C	0.46	0.56
D	1.70	2.29

All dimensions are in mm.

DO-35, 52mm Taping Specification

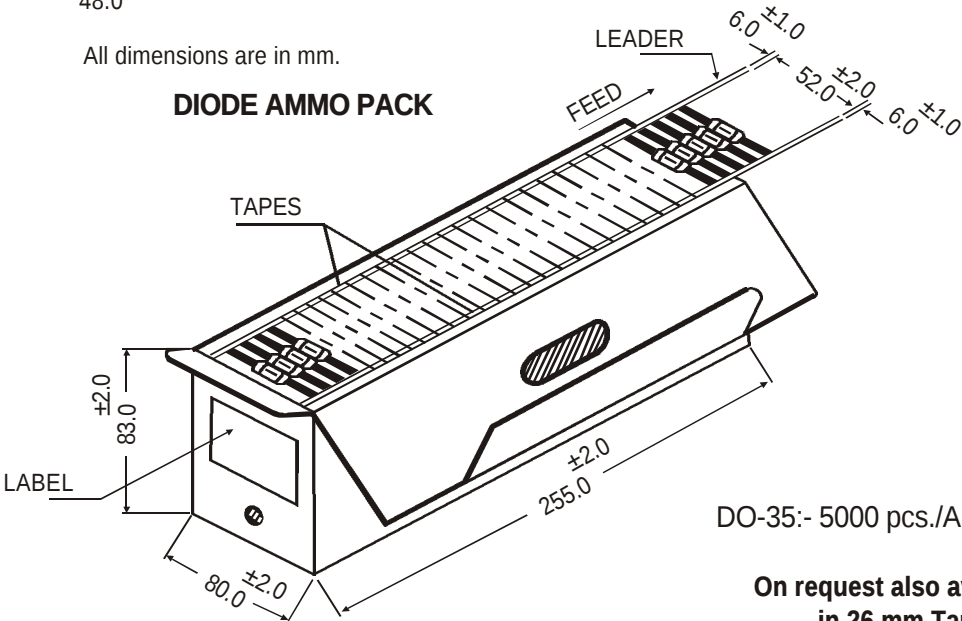


All dimensions are in mm.

52 mm Taping Specification

1. T & A indicates Axial Tape and Ammo Packing (52 mm Tape Spacing).
2. 300 mm (min) leader tape on every tape.
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.

DIODE AMMO PACK



DO-35:- 5000 pcs./Ammo Pack

On request also available
in 26 mm Tape

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
DO-35 T&A	5K/ammo box	0.88 kg/5K pcs	10" x 3.2" x 3.2"	5K	12.7" x 12.7" x 20"	125K	25 kgs

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes**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 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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