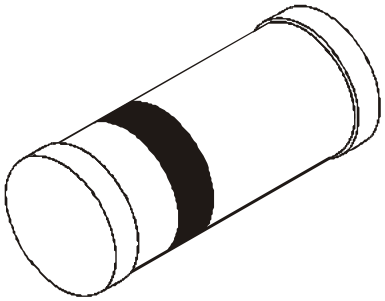
SILICON ZENER DIODES

CLL5230A - CLL5261A



SOD-80C

Hermetically Sealed Glass Silicon Zener Diodes

SOD-80C Zener Diodes
CLL5230A to CLL5261A, 500mW Hermetically Sealed, Glass Silicon Zener Diodes

Maximum Ratings

Ratings	Symbol	Value	Unit
DC Power Dissipation @ $T_A \leq 50°C$ Derate above $T_A = 50°C$	P_D	500 3.3	mW mW/°C
Operating and Storage Junction Temperature Range	$T_J - T_{stg}$	– 65 to + 200	° C

Electrical Characteristics

T_A = 25°C Unless otherwise noted Based on dc measurements at thermal equilibrium; case temperature maintained at 30 ± 2°C. V_F = 1.1 max @ I_F = 200 mA for all types.

Type No. (Note 1)	Nominal Zener Voltage V_Z @ I_{ZT} Volts (Note 2)	Test Current I_{ZT} mA (Note 2)	Max Zener Impedance A and B Suffix only		Max Reverse Leakage Current				Max Zener Voltage Temperature Coeff. (A and B Suffix only)
					A and B Suffix only			Non-Suffix	
			Z_{ZT} @ I_{ZT} Ohms	Z_{ZK} @ I_{ZK} = 0.25 mA Ohms	I_R µA	@ V_R Volts A	@ V_R Volts B	I_R @ V_R Used for Suffix A µA	θVZ (%/°C)
CLL5230A	4.7	20	19	1900	5.0	1.9	2.0	50	± 0.030
CLL5231A	5.1	20	17	1600	5.0	1.9	2.0	50	± 0.030
CLL5232A	5.6	20	11	1600	5.0	2.9	3.0	50	+ 0.038
CLL5233A	6.0	20	7	1600	5.0	3.3	3.5	50	+ 0.038
CLL5234A	6.2	20	7	1000	5.0	3.8	4.0	50	+ 0.045
CLL5235A	6.8	20	5	750	3.0	4.8	5.0	30	+ 0.050
CLL5236A	7.5	20	6	500	3.0	5.7	6.0	30	+ 0.058
CLL5237A	8.2	20	8	500	3.0	6.2	6.5	30	+ 0.062
CLL5238A	8.7	20	8	600	3.0	6.2	6.5	30	+ 0.065
CLL5239A	9.1	20	10	600	3.0	6.7	7.0	30	+ 0.068
CLL5240A	10.0	20	17	600	3.0	7.6	8.0	30	+ 0.075
CLL5241A	11.0	20	22	600	2.0	8.0	8.4	30	+ 0.076
CLL5242A	12.0	20	30	600	1.0	8.7	9.1	10	+ 0.077
CLL5243A	13.0	9.5	13	600	0.5	9.4	9.9	10	+ 0.079
CLL5244A	14.0	9.0	15	600	0.1	9.5	10.0	10	+ 0.082
CLL5245A	15.0	8.5	16	600	0.1	10.5	11.0	10	+ 0.082
CLL5246A	16.0	7.8	17	600	0.1	11.4	12.0	10	+ 0.083
CLL5247A	17.0	7.4	19	600	0.1	12.4	13.0	10	+ 0.084

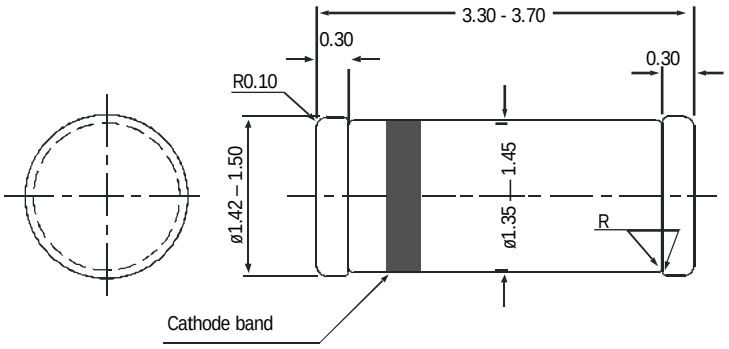
Electrical Characteristics

T_A = 25°C Unless otherwise noted Based on dc measurements at thermal equilibrium; case temperature maintained at 30 ± 2°C. V_F = 1.1 max @ I_F = 200 mA for all types.

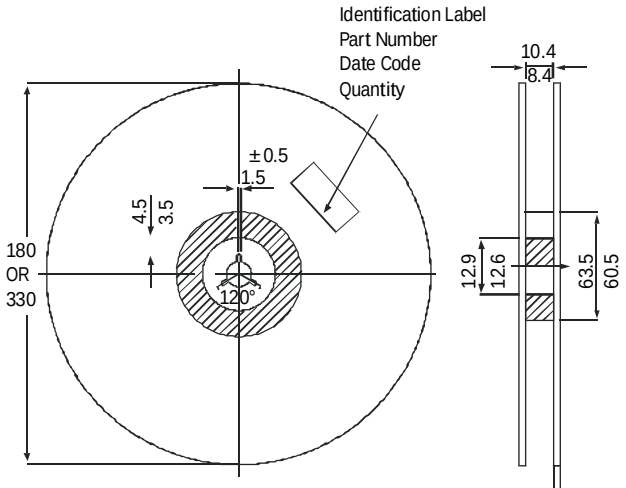
Type No. (Note 1)	Nominal Zener Voltage V_Z @ I_{ZT} Volts (Note 2)	Test Current I_{ZT} mA (Note 2)	Max Zener Impedance A and B Suffix only		Max Reverse Leakage Current A and B Suffix only			Non-Suffix	Max Zener Voltage Temperature Coeff. (A and B Suffix only) θVZ (%/°C)
			Z_{ZT} @ I_{ZT} Ohms	Z_{ZK} @ I_{ZK} = 0.25 mA Ohms	I_R µA	@ V_R Volts A	@ V_R Volts B	I_R @ V_R Used for Suffix A µA	
CLL5248A	18.0	7.0	21	600	0.1	13.3	14.0	10	+ 0.085
CLL5249A	19.0	6.6	23	600	0.1	13.3	14.0	10	+ 0.086
CLL5250A	20.0	6.2	25	600	0.1	14.3	15.0	10	+ 0.086
CLL5251A	22.0	5.6	29	600	0.1	16.2	17.0	10	+ 0.087
CLL5252A	24.0	5.2	33	600	0.1	17.1	18.0	10	+ 0.088
CLL5253A	25.0	5.0	35	600	0.1	18.1	19.0	10	+ 0.089
CLL5254A	27.0	4.6	41	600	0.1	20.0	21.0	10	+ 0.090
CLL5255A	28.0	4.5	44	600	0.1	20.0	21.0	10	+ 0.091
CLL5256A	30.0	4.2	49	600	0.1	22.0	23.0	10	+ 0.091
CLL5257A	33.0	3.8	58	700	0.1	24.0	25.0	10	+ 0.092
CLL5258A	36.0	3.4	70	700	0.1	26.0	27.0	10	+ 0.093
CLL5259A	39.0	3.2	80	800	0.1	29.0	30.0	10	+ 0.094
CLL5260A	43.0	3.0	93	900	0.1	31.0	33.0	10	+ 0.095
CLL5261A	47.0	2.7	105	1000	0.1	34.0	36.0	10	+0.095

Polarity : Cathode indicated by colour band.
Note 1 : Suffix A for ± 10% tolerance; Suffix B for ± 5% tolerance. **Note 2 :** Pulse test : 20ms ≤ tp ≤ 50ms.

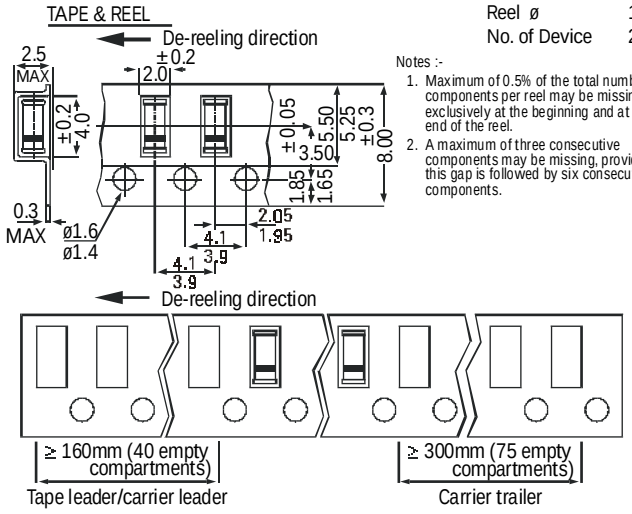
SOD 80C (LL-34) Mini MELF Hermetically Sealed Glass Package



All Dimensions are in mm



Reel ø	180 mm (7")	330 mm (13")
No. of Device	2,500	10,000



Notes :-
1. Maximum of 0.5% of the total number of components per reel may be missing- exclusively at the beginning and at the end of the reel.
2. A maximum of three consecutive components may be missing, provided this gap is followed by six consecutive components.

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOD-80C T&R	2.5K/reel	100 gm/3K pcs	3" x 7.5" x 7.5"	10.0K	17" x 15" x 13.5"	160.0K	10 kgs
	10K/reel	400 gm/10K pcs	13" x 13" x 0.5"	10.0K	17" x 15" x 13.5"	300.0K	15 kgs

Notes

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 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 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.

CDIL is a registered Trademark of
Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdilsemi.com