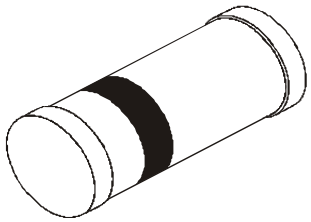
Continental Device India Limited

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

SILIICON PLANAR ZENER DIODES

CLL5227 to CLL5261



SOD - 80C
Mini MELF (LL-34)

Polarity : Cathode is indicated by a blue band

Hermetically Sealed, Glass Silicon Zener Diodes

ABSOLUTE MAXIMUM RATINGS.

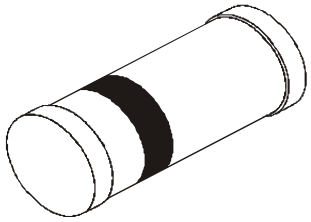
DESCRIPTION	SYMBOL	VALUE	UNIT
DC Power Dissipation at T_a=50 ºC	PD	500	mW
Derating above T_a= 50 ºC		3.3	mW/ ºC
Operating and Storage JunctionTemperature Range	T_j, T_{stg}	- 65 to +200	ºC

ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

Forward Voltage at I_F=200mA V_F <1.1 V

DEVICE# (Note1)	NOMINAL ZENER VOLTAGE V_Z at I_{ZT} (Volts) (Note2)	TEST CURRENT I_{ZT} (mA) (Note2)	MAX ZENER IMPEDANCE A&B SUFFIX ONLY Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} at I_{ZK}=0.25mA (Ω)	MAX REVERSE LEAKAGE CURRENT A & B SUFFIX ONLY I_R at V_R (mA)	V_R (Volts) A	V_R (Volts) B	NON SUFFIX I_R at V_R Used for Suffix A (mA)	MAX ZENER VOLTAGE TEMP.COEFF. (A&B SUFFIX 0NLY) *V_Z'(%/°C) Note(3)
CLL5227A	3.6	20	24	1700	15	0.95	1.0	100	-0.065
CLL5228A	3.9	20	23	1900	10	0.95	1.0	75	-0.06
CLL5229A	4.3	20	22	2000	5.0	0.95	1.0	50	-0.055
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	7.0	1600	5.0	3.3	3.5	50	+0.038
CLL5234A	6.2	20	7.0	1000	5.0	3.8	4.0	50	+0.045
CLL5235A	6.8	20	5.0	750	3.0	4.8	5.0	30	+0.05
CLL5236A	7.5	20	6.0	500	3.0	5.7	6.0	30	+0.058
CLL5237A	8.2	20	8.0	500	3.0	6.2	6.5	30	+0.062
CLL5238A	8.7	20	8.0	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	20	17	600	3.0	7.6	8.0	30	+0.075

SILIICON PLANAR ZENER DIODES **CLL5227 to CLL5261**



SOD - 80C
Mini MELF (LL-34)

Polarity : Cathode is indicated by a blue band

ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

Forward Voltage at I_F=200mA V_F <1.1 V

DEVICE# (Note1)	NOMINAL ZENER VOLTAGE V_Z at I_{ZT} (Volts) (Note2)	TEST CURRENT I_{ZT} (mA) (Note2)	MAX ZENER A&B SUFFIX ONLY Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} at I_{ZK}=0.25mA (Ω)	MAX REVERSE LEAKAGE CURRENT A & B SUFFIX ONLY I_R at V_R (I_R (mA))	V_R (Volts) A	V_R (Volts) B	NON SUFFIX I_R at V_R used for Suffix A (I_R (mA))	MAX ZENER VOLTAGE TEMP.COEFF. (A&B SUFFIX 0NLY) *V_Z'(%/ºC) Note(3)
CLL5241A	11	20	22	600	2.0	8.0	8.4	30	+0.076
CLL5242A	12	20	30	600	1.0	8.7	9.1	10	+0.077
CLL5243A	13	9.5	13	600	0.5	9.4	9.9	10	+0.079
CLL5244A	14	9.0	15	600	0.1	9.5	10	10	+0.082
CLL5245A	15	8.5	16	600	0.1	10.5	11	10	+0.082
CLL5246A	16	7.8	17	600	0.1	11.4	12	10	+0.083
CLL5247A	17	7.4	19	600	0.1	12.4	13	10	+0.084
CLL5248A	18	7.0	21	600	0.1	13.3	14	10	+0.085
CLL5249A	19	6.6	23	600	0.1	13.3	14	10	+0.086
CLL5250A	20	6.2	25	600	0.1	14.3	15	10	+0.086
CLL5251A	22	5.6	29	600	0.1	16.2	17	10	+0.087
CLL5252A	24	5.2	33	600	0.1	17.1	18	10	+0.088
CLL5253A	25	5.0	35	600	0.1	18.1	19	10	+0.089
CLL5254A	27	4.6	41	600	0.1	20	21	10	+0.090
CLL5255A	28	4.5	44	600	0.1	20	21	10	+0.091
CLL5256A	30	4.2	49	600	0.1	22	23	10	+0.091
CLL5257A	33	3.8	58	700	0.1	24	25	10	+0.092
CLL5258A	36	3.4	70	700	0.1	26	27	10	+0.093
CLL5259A	39	3.2	80	800	0.1	29	30	10	+0.094
CLL5260A	43	3.0	93	900	0.1	31	33	10	+0.095
CLL5261A	47	2.7	105	1000	0.1	34	36	10	+0.095

NOTE1= SUFFIX 'A' +/- 10% TOLERANCE, AND Suffix 'B' +/- 5% TOLERANCE

NOTE2= Pulse Test: 20ms< tp<50ms

NOTE3= Temperature coefficient (*vz).

Test conditions for temperature coefficient are as follows.

a. I_{ZT}=7.5mA, T_J=25ºC

T2=125 deg C(CLL5227A, B thru CLL5242A, B)

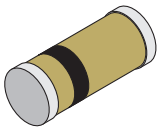
b. I_{ZT}=Rated I_{ZT}, T_J=25ºC

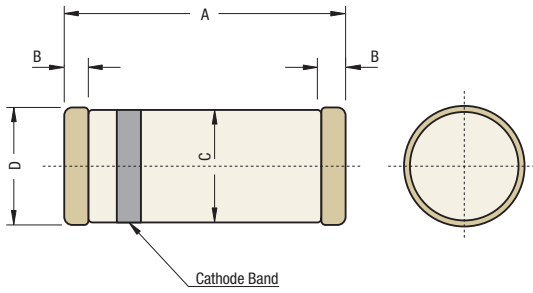
T2=125 ºC (CLL5243A, B thru CLL5261A, B)

Device to be temperature stabilized with current applied prior to reading brekdown voltage at the specified ambient temperature

SOD - 80C
Mini MELF (LL-34)

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

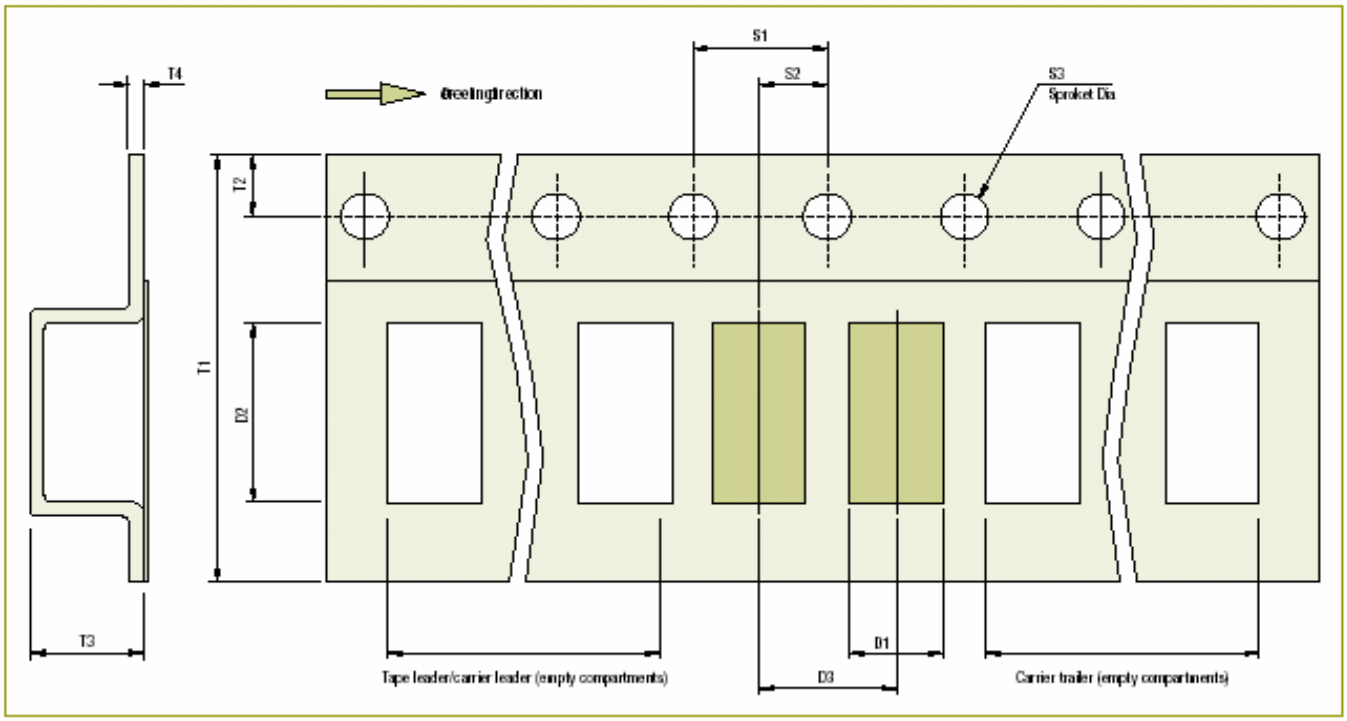




DIM	Min	Max
A	3.30	3.70
B	0.20	0.40
C	1.375	1.425
D	1.40	1.54

Cathode is marked by a Band

Packaging Tape Specifications for SMD Packages



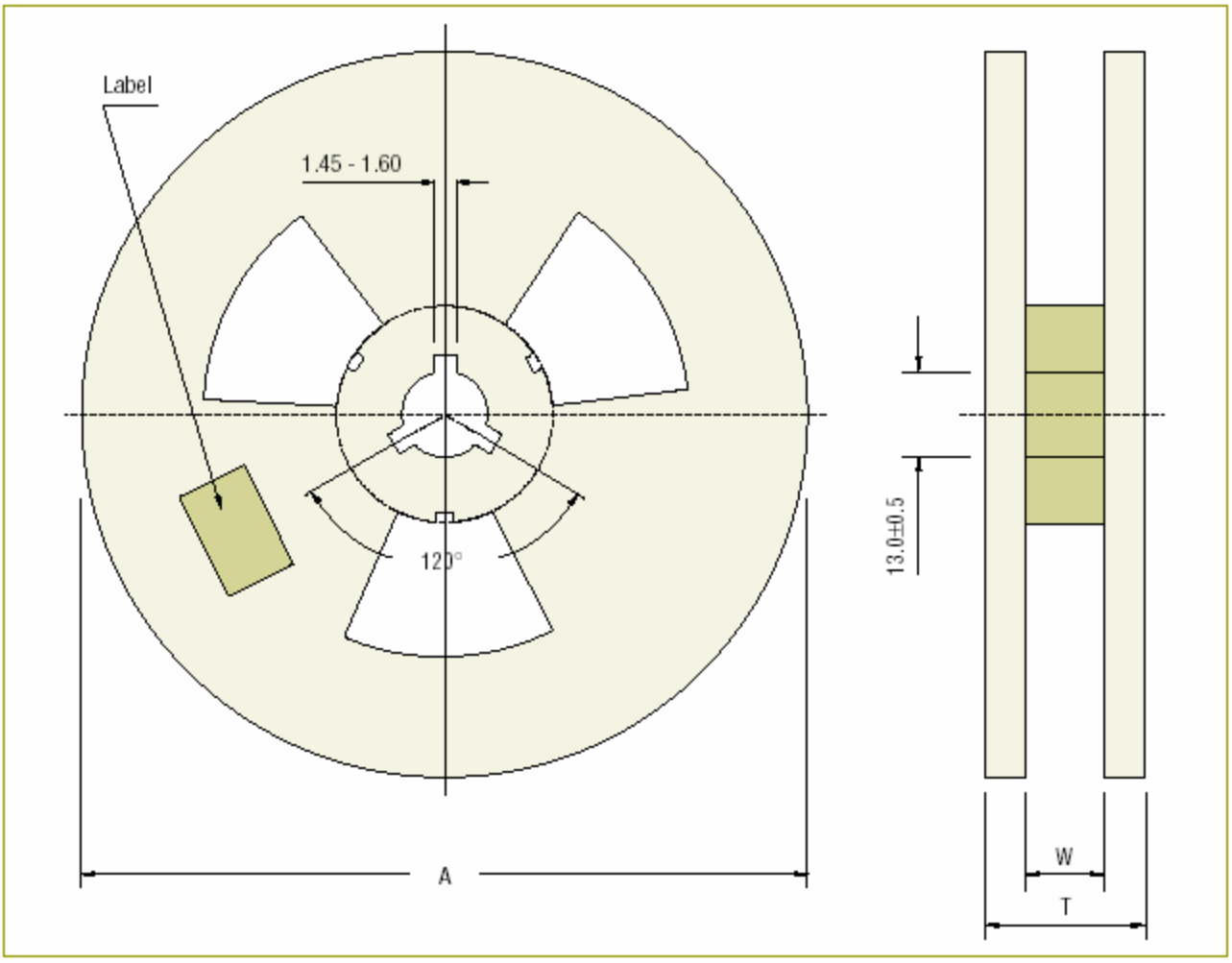
SMD Tape Specifications (8-12 mm)

Device	D1	D2	D3	T1	T2	T3	T4	S1	S2	S3
						Max	Max			Dia
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm

SOD - 80C

Mini MELF (LL-34)

Reel Specifications for SMD Packages



Reel Specifications

Package	Tape Width	Reel Dia. A - Max	Devices per Reel and MOQ	Inside Thickness W	Reel Thickness T - Max
SOD-80C (Mini MELF)	8	180	2,500	8.4±2	14.4
	8	330	10,000	8.4±2	14.4