

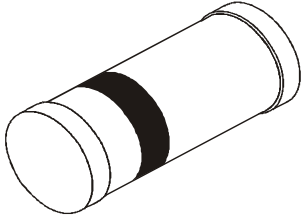
**HIGH SPEED SILICON SWITCHING DIODES**

**LL4148**

**LL4448**

**SOD - 80C**

**Mini MELF (LL- 34 )**



**Polarity: Cathode is indicated by a black band**

**Hermetically Sealed, Glass Silicon Diodes**

**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Reverse Voltage (Continuous)	$V_R$	75	V
Average Rectified Forward Current	$I_F(av)$	150	mA
Forward Current (DC)	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non Repetitive Peak Surge Current $t=1\text{ ms}$	$I_{FSM}$	2000	mA
$t=1\text{ s}$	$I_{FSM}$	500	mA
Power Dissipation up to $T_{amb}=25\text{ }^\circ\text{C}$	$P_{tot}$	500	mW
Derating factor		2.85	mW/K
Operating and Storage Junction Temperature Range	$T_j, T_{stg}$	- 65 to +200	$^\circ\text{C}$

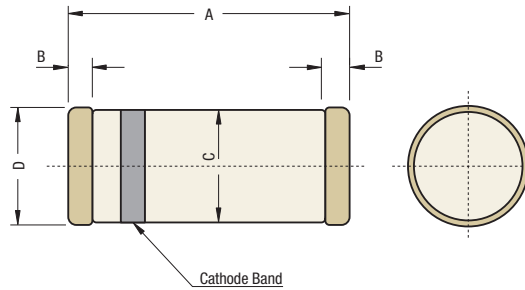
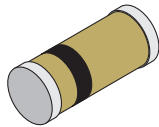
**ELECTRICAL CHARACTERISTICS ( $T_a=25\text{ }^\circ\text{C}$  Unless Otherwise Specified)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	$V_F$	$I_F=10\text{mA}$ <b>LL4148</b>		1.0	V
		$I_F=5\text{mA}$ <b>LL4448</b>	0.62	0.72	V
		$I_F=100\text{mA}$ <b>LL4448</b>		1.0	V
Reverse Current	$I_R$	$V_R=20\text{V}$		25	nA
		$V_R=75\text{V}$		5.0	$\mu\text{A}$
		$V_R=20\text{V}, T_j=100^\circ\text{C}$ , <b>LL4448</b>		3.0	$\mu\text{A}$
		$V_R=20\text{V}, T_j=150^\circ\text{C}$		50	$\mu\text{A}$
Reverse Breakdown Voltage	$V_{BR}$	$I_R=100\mu\text{A}$	100		V

**DYNAMIC CHARACTERISTICS**

Diode Capacitance	$C_d$	$V_R=0\text{V}, f=1\text{MHz}$		4.0	pF
Forward Recovery Voltage	$V_{fr}$	$I_F=50\text{mA}, t_r=20\text{ns}$		2.5	V
Reverse Recovery Time	$t_{rr}$	$I_F=10\text{mA}$ to $I_R=60\text{mA}, R_L=100\ \Omega$ , Measured at $I_R=1\text{mA}$		4.0	ns

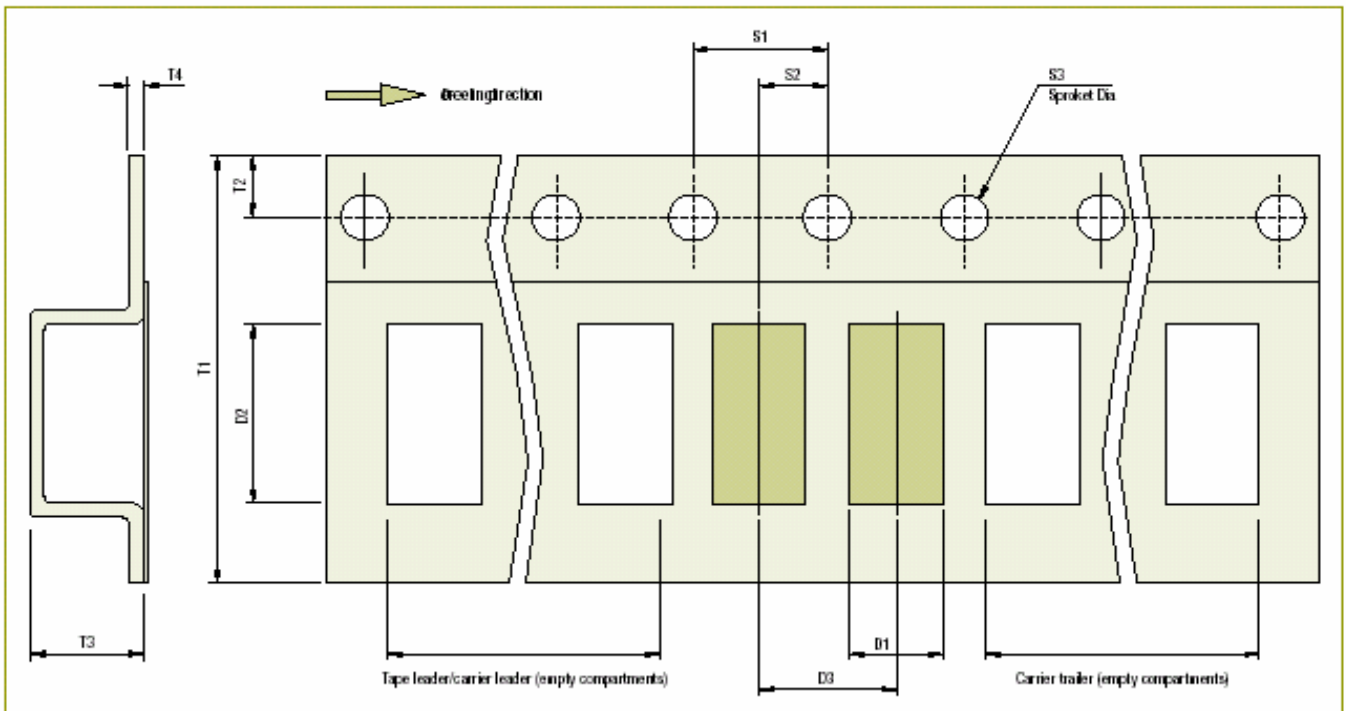
**SOD-80C/LL-34**  
(Mini MELF)  
Hermetically Sealed  
SMD Glass Package



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

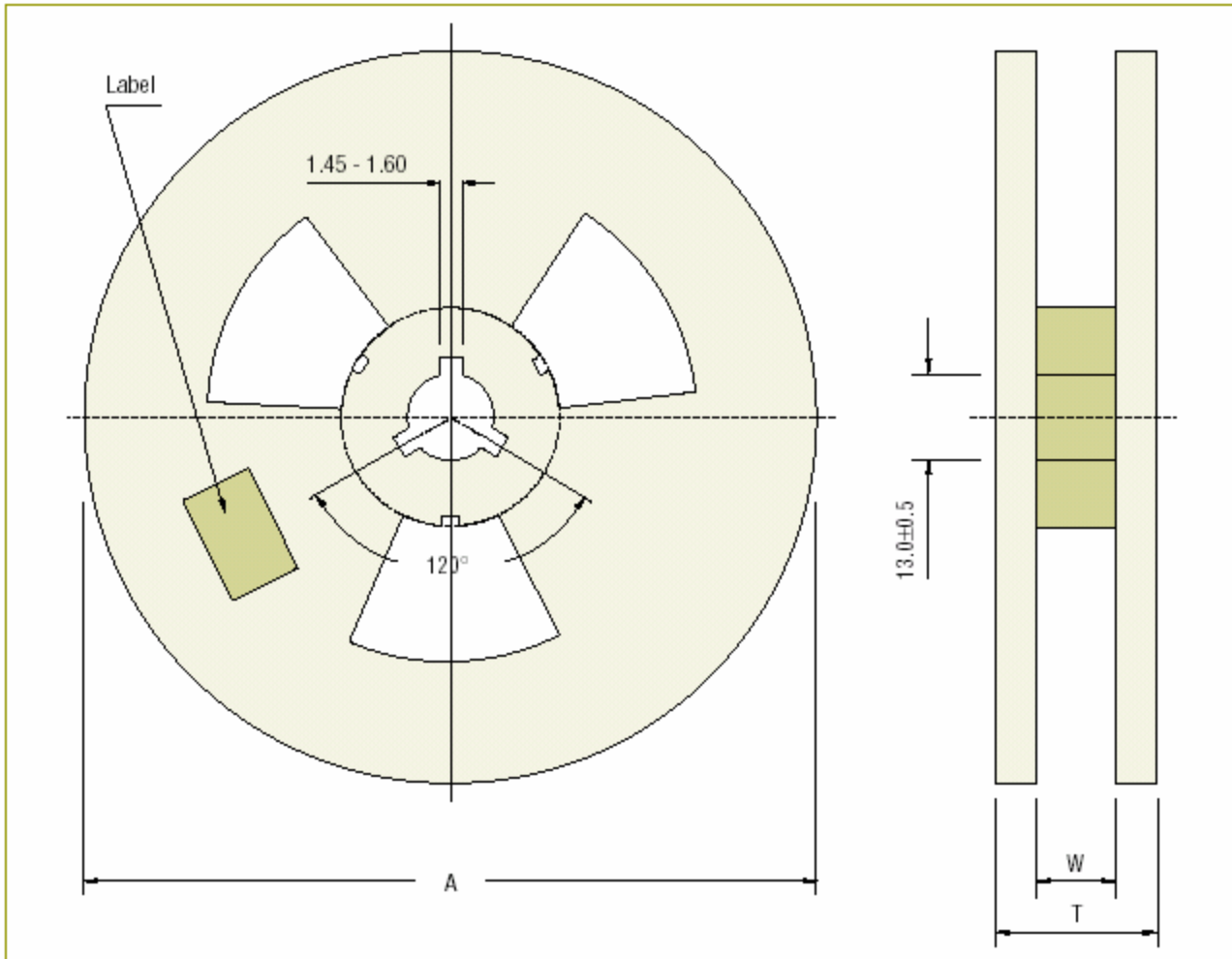
**Packaging Tape Specifications for SMD Packages**



**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

## Reel Specifications for SMD Packages



### Reel Specifications

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

**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).

**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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