

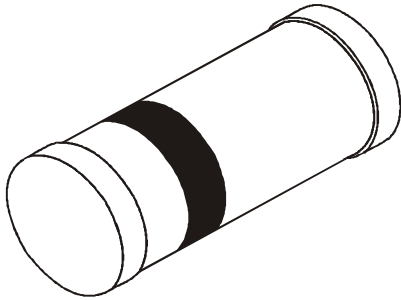
## HIGH SPEED SILICON SWITCHING DIODES

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 $T_{amb}=25^\circ \text{C}$	$P_{tot}$	500	mW
Derating factor		2.85	mW/K
Operating & Storage Junction Temperature Range	$T_j, T_{stg}$	- 65 to +200	$^\circ \text{C}$

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

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

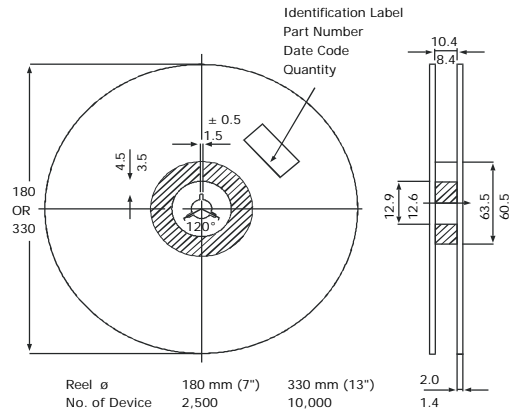
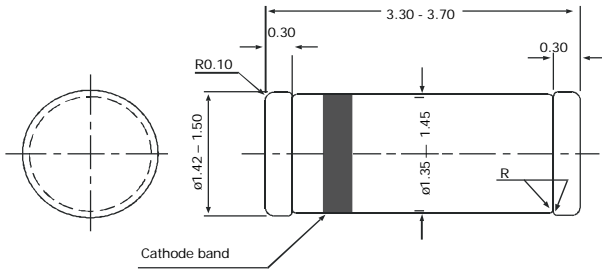
#### DYNAMIC CHARACTERISTICS

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

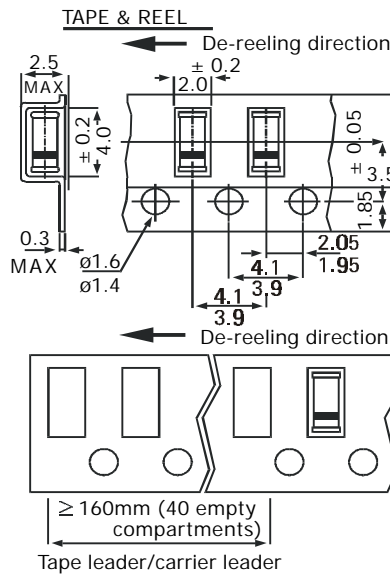
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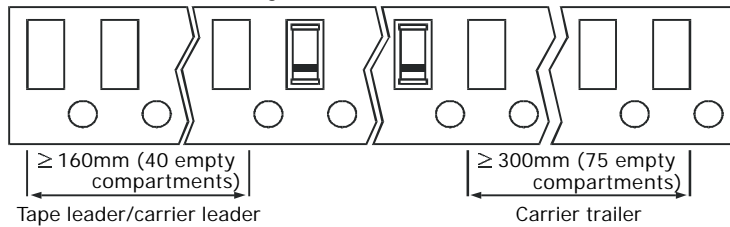
### SOD 80C (LL-34) Mini MELF Hermetically Sealed Glass Package



All dimensions are in mm



- 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