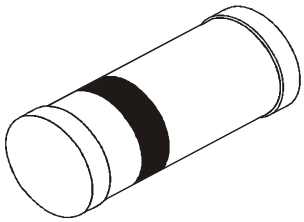
HIGH SPEED SILICON SWITCHING DIODES

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 ms	I_{FSM}	2000	mA
t=1 s	I_{FSM}	500	mA
Power Dissipation up to Tamb=25 ºC	P_{tot}	500	mW
Derating factor		2.85	mW/K
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200	ºC

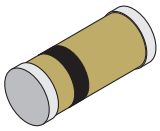
ELECTRICAL CHARACTERISTICS (T_a=25 ºC Unless Otherwise Specified)

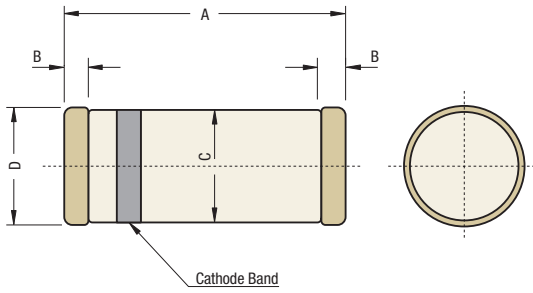
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	I_F=10mA **LL4148**		1.0	V
		I_F=5mA **LL4448**	0.62	0.72	V
		I_F=100mA **LL4448**		1.0	V
Reverse Current	I_R	V_R=20V		25	nA
		V_R=75V		5.0	µA
		V_R=20V, T_j=100º C, **LL4448**		3.0	µA
		V_R=20V, T_j=150º C		50	µA
Reverse Breakdown Voltage	V_{BR}	I_R=100µA	100		V

DYNAMIC CHARACTERISTICS

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

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

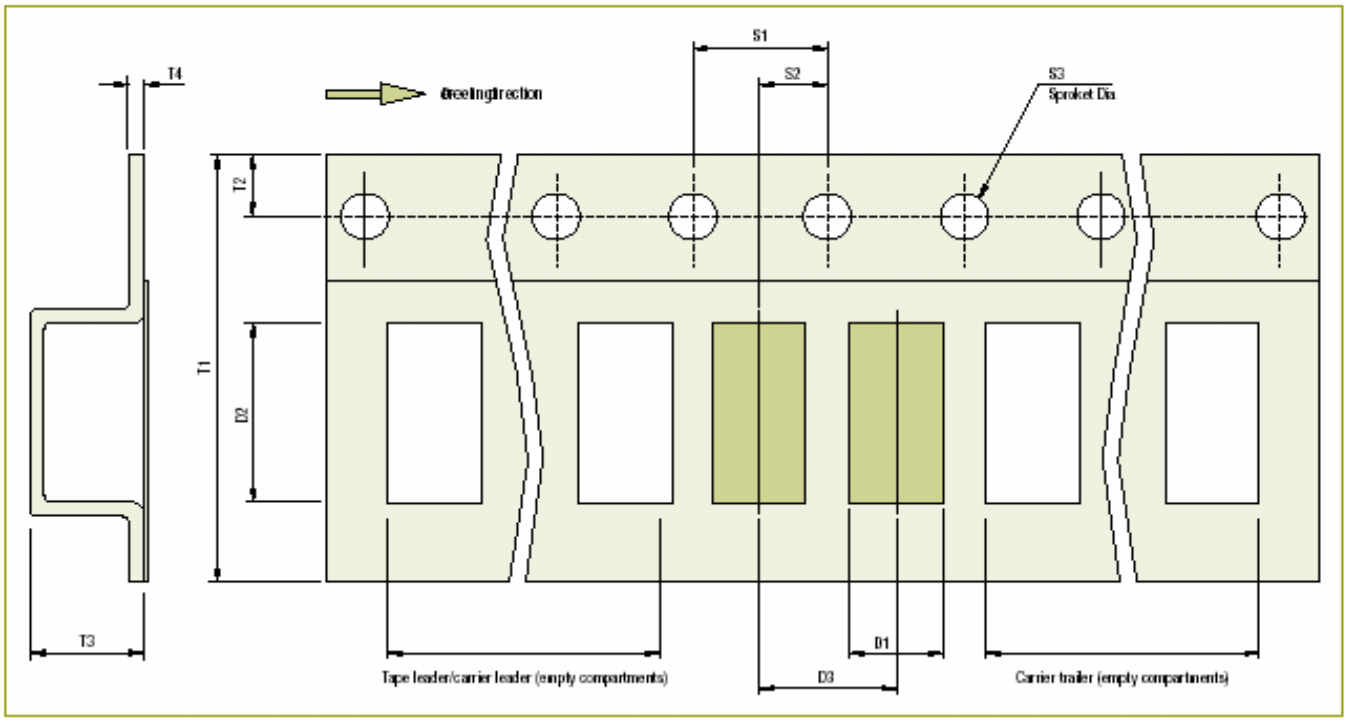




DIM	Min	Max
A	3.30	3.70
B	0.20	0.40
C	1.375	1.425
D	1.40	1.54

Cathode is marked by a Band

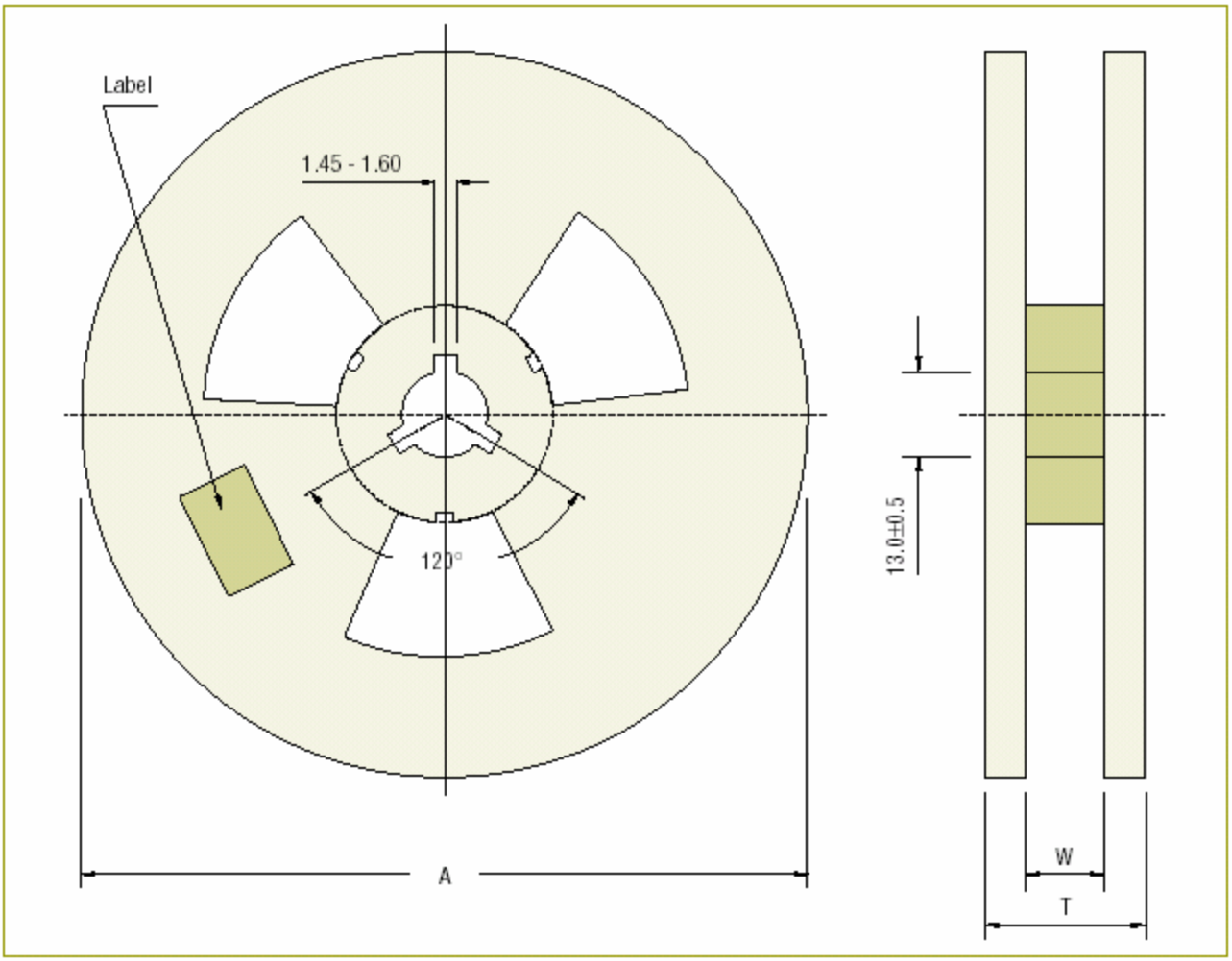
Packaging Tape Specifications for SMD Packages



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 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

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

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