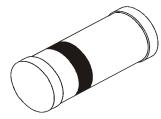


Continental Device India Limited An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



## 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

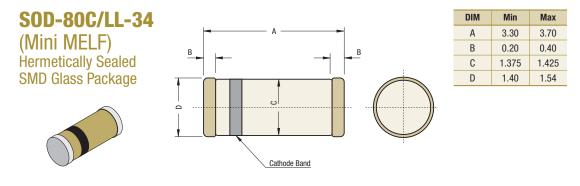
DESCRIPTION	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Reverse Voltage (Continuous)	V <sub>R</sub>	75	V
Average Rectified Forward Current	l <sub>F</sub> (av)	150	mA
Forward Current (DC)	I <sub>F</sub>	200	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	450	mA
Non Repetitive Peak Surge Current t=1 ms	I <sub>FSM</sub>	2000	mA
t=1 s	I <sub>FSM</sub>	500	mA
Power Dissipation up to Tamb=25 °C	P <sub>tot</sub>	500	mW
Derating factor		2.85	mW/K
Operating and Storage Junction Temperature Range	$T_{j},T_{stg}$	- 65 to +200	°C

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25 °C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST COND	MIN	MAX	UNIT	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA I <sub>F</sub> =5mA I <sub>F</sub> =100mA	LL4148 LL4448 LL4448	0.62	1.0 0.72 1.0	V V V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =20V V <sub>R</sub> =75V V <sub>R</sub> =20V, T <sub>j</sub> =100° C,	LL4448		25 5.0 3.0	nA μA μA
		$V_{R}=20V, T_{j}=150^{\circ} C$			50	μA
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =100µ	ιA	100		V

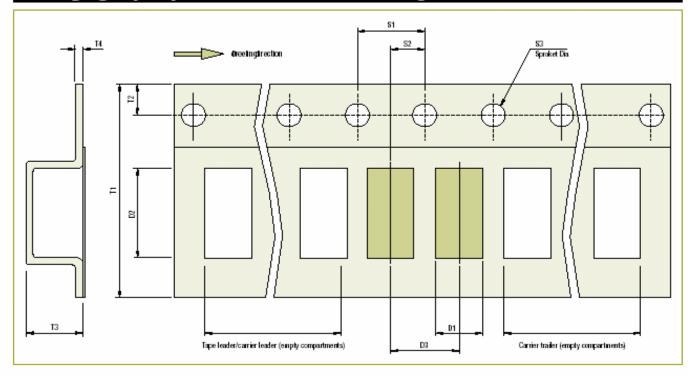
### DYNAMIC CHARACTERISTICS

Diode Capacitance	C <sub>d</sub>	C <sub>d</sub> V <sub>R</sub> =0V, f=1MHz		4.0	pF
Forward Recovery Voltage	V <sub>fr</sub>	I <sub>F</sub> =50mA, t <sub>r</sub> =20ns		2.5	V
Reverse Recovery Time	t <sub>rr</sub>	$I_F$ =10mA to $I_R$ =60mA, R <sub>L</sub> =100 $\Omega$ , Measured at $I_R$ =1mA		4.0	ns



Cathode is marked by a Band

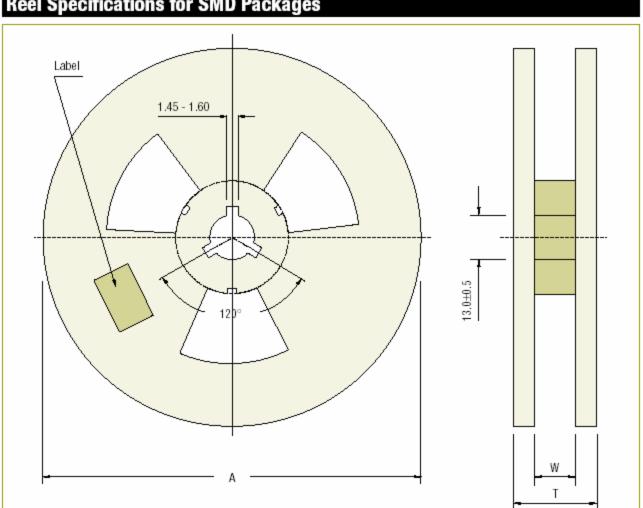
## Packaging Tape Specifications for SMD Packages



SMD Tape Specifications (8-12 mm)										
Device	Di	D2	D3	Ti	T2	T3	T4	St	\$2	\$3
						Max	Max			Dia
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm

LL4148 LL4448

**SOD - 80C** Mini MELF (LL- 34)



# **Reel Specifications for SMD Packages**

# **Reel Specifications**

Package	Tape	Reel Dia.	Devices	Inside	Reel	
	Width		per Reel	Thickness	Thickness	
		A - Max	and MOQ	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	

SOD - 80C Mini MELF (LL- 34 )

### **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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