

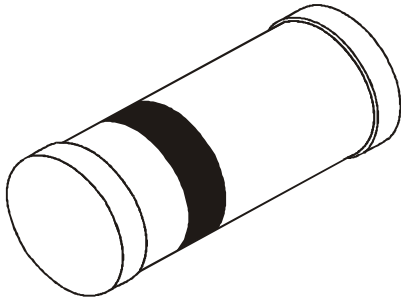
HIGH SPEED SILICON SWITCHING DIODES

CLL4148

CLL4448

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 $t=1\text{ ms}$ $t=1\text{ s}$	I_{FSM}	2000	mA
	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	$^\circ\text{C}$

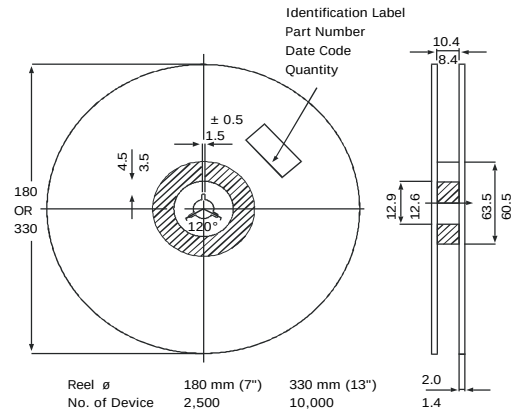
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F=10\text{mA}$ CLL4148 $I_F=5\text{mA}$ CLL4448 $I_F=100\text{mA}$ CLL4448	0.62	1.0 0.72 1.0	V
Reverse Current	I_R	$V_R=20\text{V}$ $V_R=75\text{V}$ $V_R=20\text{V}, T_j=100^\circ\text{C}$, CLL4448 $V_R=20\text{V}, T_j=150^\circ\text{C}$		25 5.0 3.0 50	nA μA μA μA
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 @ $I_R=1\text{mA}$		4.0	ns

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TAPE & REEL

De-reeling direction

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.

Technical drawing showing dimensions and de-reeling direction for a tape reel. The drawing includes a side view of the reel with dimensions: 2.5 MAX, 0.2, 4.0, 0.2, 0.3 MAX, 1.6, 1.4, 4.1, 3.9, 4.1, 3.9, 2.05, 1.95, 1.85, 3.5, 1.65, 5.50, 5.25, 8.00, and 0.3. The drawing also shows a top view of the reel with dimensions: 160mm (40 empty compartments) and 300mm (75 empty compartments). The drawing is labeled 'Tape leader/carrier leader' and 'Carrier trailer'.

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 10K/reel	100 gm /3K pcs 400 gm /10K pcs	3" x 7.5" x 7.5" 13" x 13" x 0.5"	10.0K 10.0K	17" x 15" x 13.5" 17" x 15" x 13.5"	160.0K 300.0K	10 kgs 15 kgs

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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 Discrete 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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Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdilsemi.com