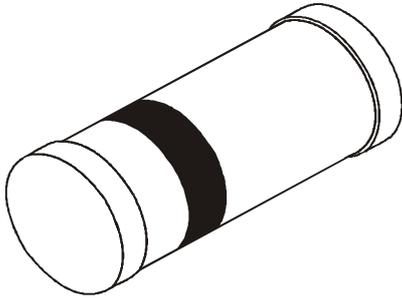


HIGH SPEED SILICON DIODES

CLL4150

SOD - 80C
Mini MELF (LL- 34)



Polarity: Cathode is indicated by a black band

Hermetically Sealed, Glass Silicon Diodes

Intended for General Purpose use in Computer and Industrial Application

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Continuous Reverse Voltage	V_R	50	V
Continuous Forward Current	I_F	300	mA
Repetitive Peak Forward Current	I_{FRM}	600	mA
Non Repetitive Peak Forward Current	I_{FSM}	t=1 ms	4.0
		t=1 ms	1.0
		t=1 s	0.5
Power Dissipation up to $T_a=25^\circ\text{C}$	P_{tot}	500	mW
Storage Temperature	T_{stg}	- 65 to 200	$^\circ\text{C}$
Junction Temperature	T_j	200	$^\circ\text{C}$

THERMAL RESISTANCE

Junction to tie point	$R_{th(j-tp)}$	300	K/W
Junction to Ambient in free air	$R_{th(j-a)}$	350	K/W

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F=1\text{mA}$	0.54	0.62	V
		$I_F=10\text{mA}$	0.66	0.74	V
		$I_F=50\text{mA}$	0.76	0.86	V
		$I_F=100\text{mA}$	0.82	0.92	V
		$I_F=200\text{mA}$	0.87	1.00	V
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$	75		V
Reverse Current	I_R	$V_R=50\text{V}$		100	nA
		$V_R=50\text{V}, T_j=150^\circ\text{C}$		100	μA

DYNAMIC CHARACTERISTICS

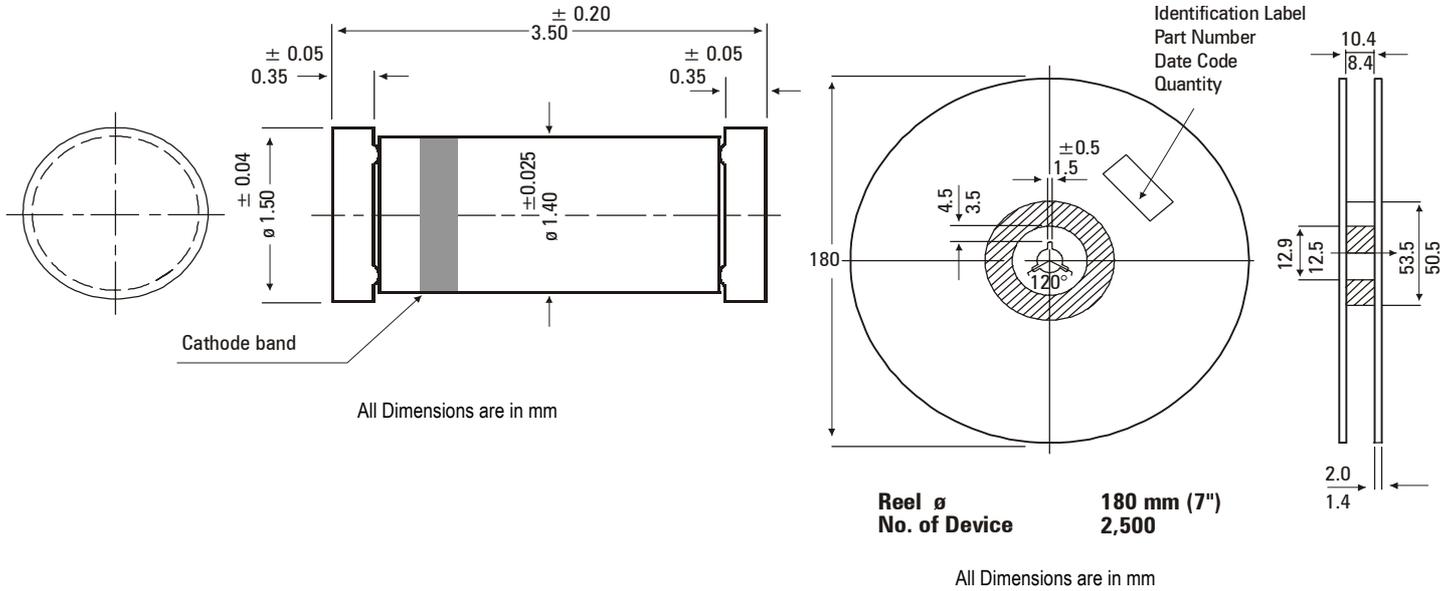
Diode Capacitance	C_d	$V_R=0\text{V}, f=1\text{MHz}$		2.5	pF
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}$, to $I_R=1\text{mA}, R_L=100\Omega$ Measured @ $I_R=0.1\text{mA}$		6.0	ns
Forward Recovery Time	t_{fr}	$I_F=200\text{mA}, t_r=0.4\text{ns}$ Measured @ $V_F=1\text{V}$		10	ns

*Device mounted on an FR4 printed circuit board

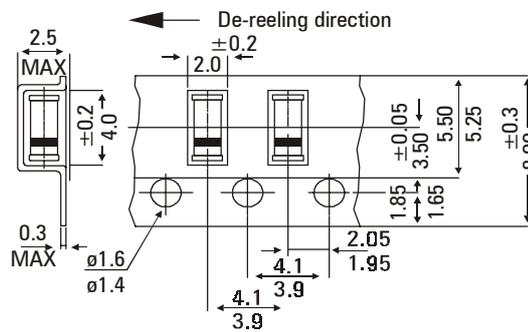
CLL4150

SOD - 80C
Mini MELF (LL-34)

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

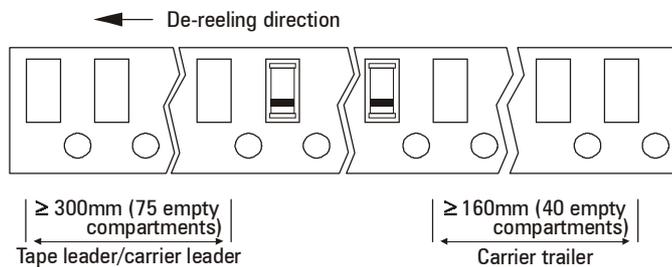


TAPE & REEL



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.



All Dimensions are in mm

Drawings are not to scale

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	225 gm/2.5K pcs	9" x 9" x 9"	40K	18" x 12" x 10" 19" x 19" x 20"	80K 320K	7.2 kgs 28.8 kgs

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).

Customer Notes

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 are 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of
Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119

email@cdil.com www.cdilsemi.com