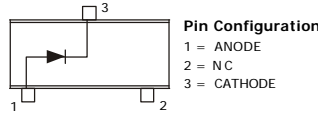
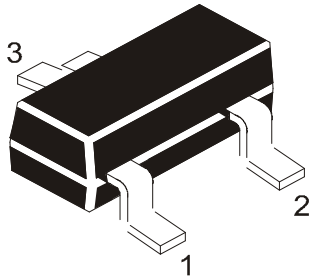


SILICON PLANAR SWITCHING DIODE

CMBD4448



**SOT-23
 Formed SMD Package**

Marking

CMBD4448 - CA2

For General Purpose Switching Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Non Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_R	75	V
Forward Continuous Current	$*I_{FM}$	500	mA
Average Rectified Output Current	$*I_O$	250	mA
Non Repetitive Peak Forward Surge Current @ $t=1ms$	I_{FSM}	4	A
Non Repetitive Peak Forward Surge Current @ $t=1s$	I_{FSM}	2	A
Power Dissipation @ $T_a=25^\circ C$	$*P_D$	350	mW
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ C$

THERMAL RESISTANCE

Junction to Ambient in free air	$*R_{th(j-a)}$	357	K/W
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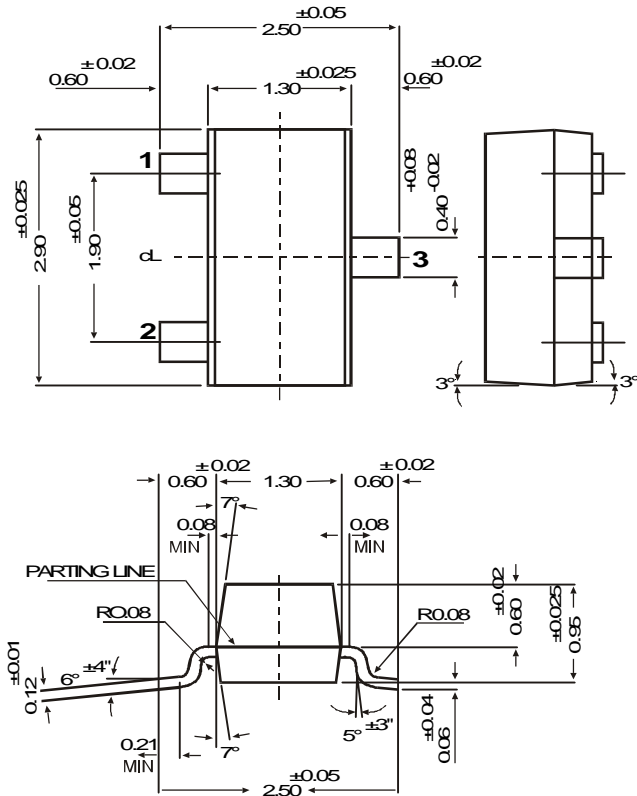
* Valid provided that terminals are kept at ambient temperature

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

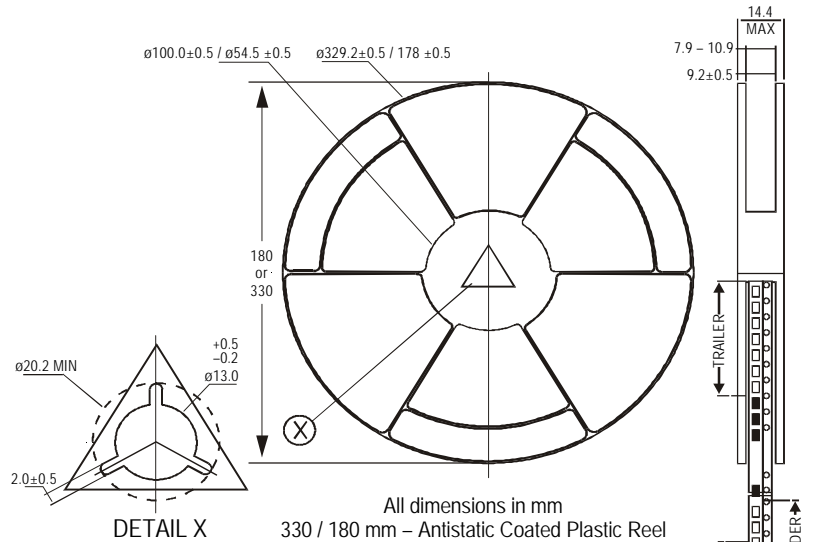
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F = 5\text{ mA}$	0.62	0.720	V
		$I_F = 10\text{ mA}$		0.855	V
		$I_F = 100\text{ mA}$		1.0	V
		$I_F = 150\text{ mA}$		1.250	V
Reverse Voltage Leakage Current	I_R	$V_R=75V$		2.5	μA
		$V_R=75V, T_j=150^\circ C$		50	μA
		$V_R=25V, T_j=150^\circ C$		30	μA
		$V_R=20V$		25	nA
Diode Capacitance	C_d	$V_R=0V, f=1MHz$		4.0	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		4.0	ns

**SOT-23
Formed SMD Package**

SOT-23 Formed SMD Package



**SOT-23 Package Reel Information
Reel Specifications for W Packing (13") and 7"**

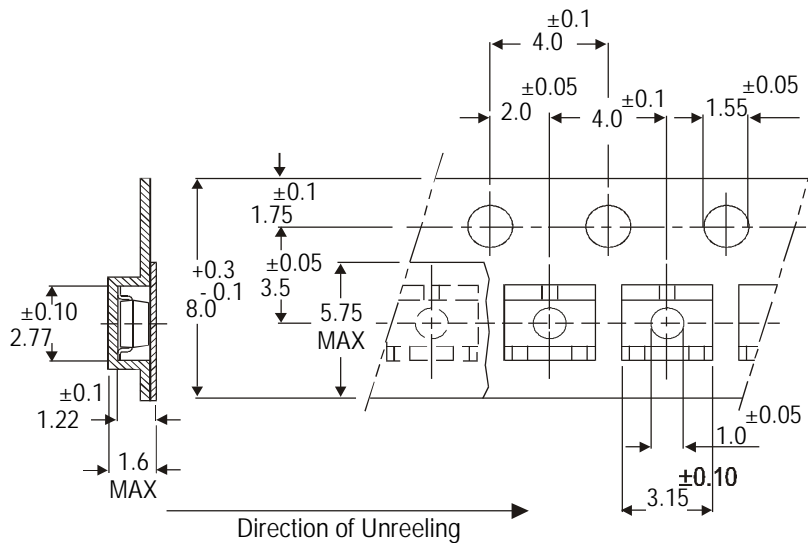


All dimensions in mm
330 / 180 mm – Antistatic Coated Plastic Reel

NOTES:

- | | 8mm Tape
Size of Reel | 8mm Tape
Size of Reel |
|----------------|----------------------------|--------------------------|
| No. of Devices | 330 mm (13")
10,000 Pcs | 180 mm (7")
3,000 Pcs |
- The bandolier of 330 mm reel contains at least 10,000 devices.
 - The bandolier of 180 mm reel contains at least 3,000 devices.
 - No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel. 15 empty compartments for 180 mm reel.
 - Three consecutive empty places might be found provided this gap is followed by 6 consecutive devices.
 - The carrier tape (leader) starts with at least 75 empty positions (equivalent to 330 mm). In order to fix the carrier tape a self adhesive tape of 20 to 50 mm is applied. At the end of the bandolier at least 40 empty positions (equivalent to 160 mm) are there.

Tape Specification for SOT-23 Surface Mount Device



Packing Detail

All dimensions in mm

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/feel	136 gm/3K pcs	3" x 7.5" x 7.5"	12 K	17" x 15" x 13.5"	192 K	12 kgs
	10K/feel	415 gm/10K pcs	9" x 9" x 9"	51 K	19" x 19" x 19"	408 K	28 kgs
			13" x 13" x 0.5"	10 K	17" x 15" x 13.5"	300 K	16 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 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).

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