

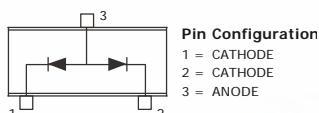
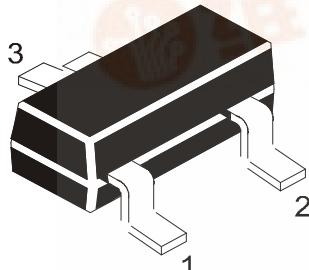


Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



## SILICON PLANAR DUAL SWITCHING DIODES



**CMBD2835  
CMBD2836**

**SOT-23  
Formed SMD Package**

### Marking

CMBD2835 - A3

CMBD2836 - A2

**High-Speed Switching Dual Diodes, Common Anode**

### ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Reverse Voltage CMBD2835 CMBD2836	$V_R$	35	V
		75	V
Forward Current	$I_F$	100	mA
Total Device Dissipation $T_a=25^\circ\text{C}$ *	$P_D$	225	mW
Derate above $25^\circ\text{C}$		1.8	$\text{mW}/^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{th(j-a)}$	556	$^\circ\text{C}/\text{W}$
Total Device Dissipation $T_a=25^\circ\text{C}$ **	$P_D$	300	mW
Derate above $25^\circ\text{C}$		2.4	$\text{mW}/^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{th(j-a)}$	417	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	$T_j, T_{stg}$	- 55 to +150	$^\circ\text{C}$

\* FR-5 Board=25.4 x 19.05 x 1.58 mm (1.0 x 0.75 x 0.062 inches)

\*\* Alumina Substrate=10.16 x 7.62 x 0.61 mm (0.4 x 0.3 x 0.024 inches) 99.5% alumina.

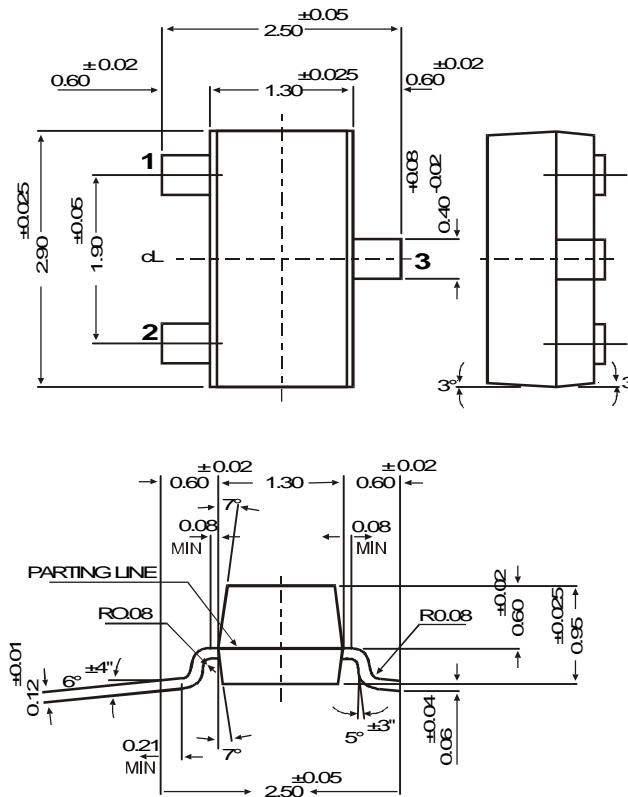
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{BR}$	$I_R=100\mu\text{A}$ CMBD2835 CMBD2836	35			V
Reverse Voltage Leakage Current	$I_R$	CMBD2835 $V_R=30\text{V}$ CMBD2836 $V_R=50\text{V}$			100	nA
					100	nA
Diode Capacitance	$C_T$	$V_R=0\text{V}, f=1\text{MHz}$			4.0	pF
Forward Voltage	$V_F$	$I_F = 10 \text{ mA}$ $I_F = 50 \text{ mA}$ $I_F = 100 \text{ mA}$			1.0	V
					1.0	V
					1.2	V
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10\text{mA}, i_{R(\text{REC})}=1.0 \text{ mA}$			4.0	ns

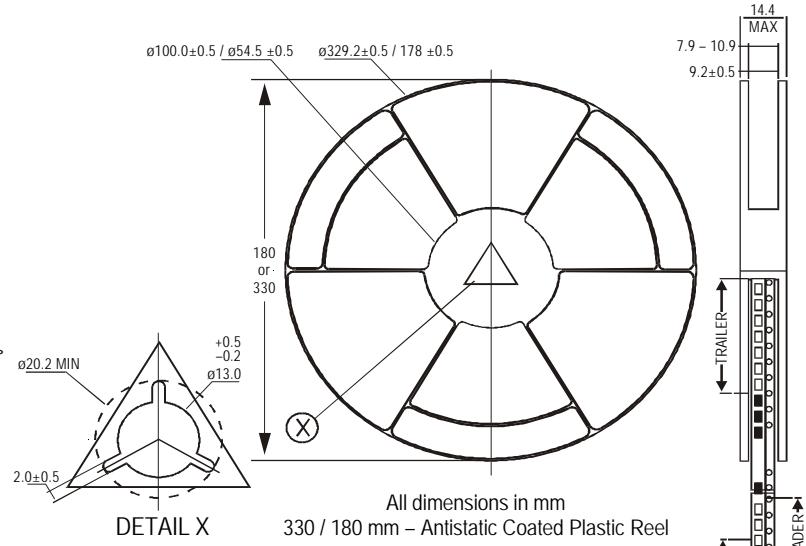
**CMBD2835**  
**CMBD2836**

**SOT-23**  
**Formed SMD Package**

**SOT-23 Formed SMD Package**



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



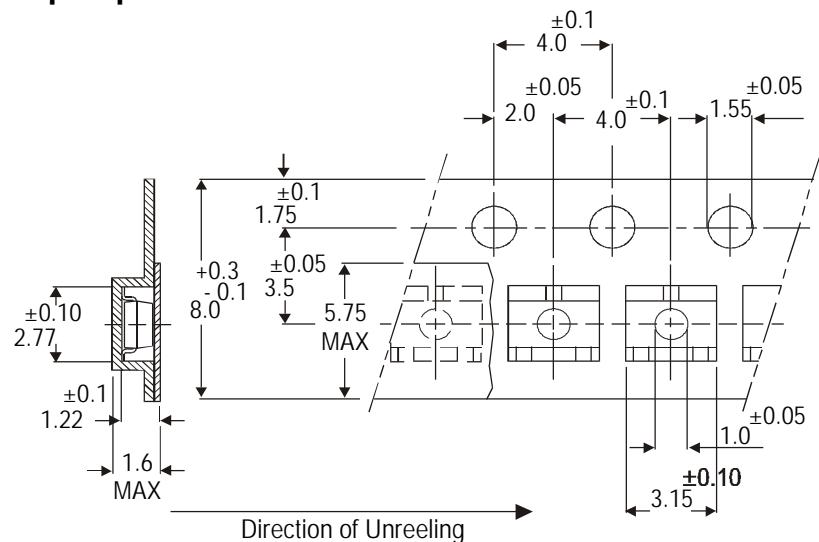
NOTES:

8mm Tape  
Size of Reel  
330 mm (13")  
10,000 Pcs

8mm Tape  
Size of Reel  
180 mm (7")  
3,000 Pcs

1. The bandolier of 330 mm reel contains at least 10,000 devices.
2. The bandolier of 180 mm reel contains at least 3,000 devices.
3. No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel. 15 empty compartments for 180 mm reel.
4. Three consecutive empty places might be found provided this gap is followed by 6 consecutive devices.
5. 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**



All dimensions in mm

**Packing Detail**

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5"	12 K	17" x 15" x 13.5"	192 K	12 kgs
	10K/reel	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

<b>Notes</b>	<b>CMBD2835</b> <b>CMBD2836</b>
	<b>SOT-23</b> <b>Formed SMD Package</b>

### **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).

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, 5141 1112 Fax + 91-11-2579 5290, 5141 1119  
email@cdil.com www.cdilsemi.com