



Continental Device India Limited

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



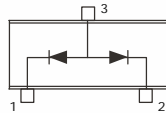
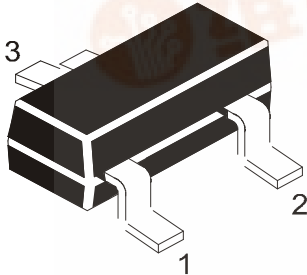
SILICON PLANAR DUAL SWITCHING DIODES

CMBD2835

CMBD2836

SOT-23

Formed SMD Package



Pin Configuration
1 = CATHODE
2 = CATHODE
3 = ANODE

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
			75
Forward Current	I_F	100	mA
Total Device Dissipation $T_a=25^\circ\text{C}$ *	P_D	225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{th(j-a)}$	556	$^\circ\text{C/W}$
Total Device Dissipation $T_a=25^\circ\text{C}$ **	P_D	300	mW
Derate above 25°C		2.4	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{th(j-a)}$	417	$^\circ\text{C/W}$
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.

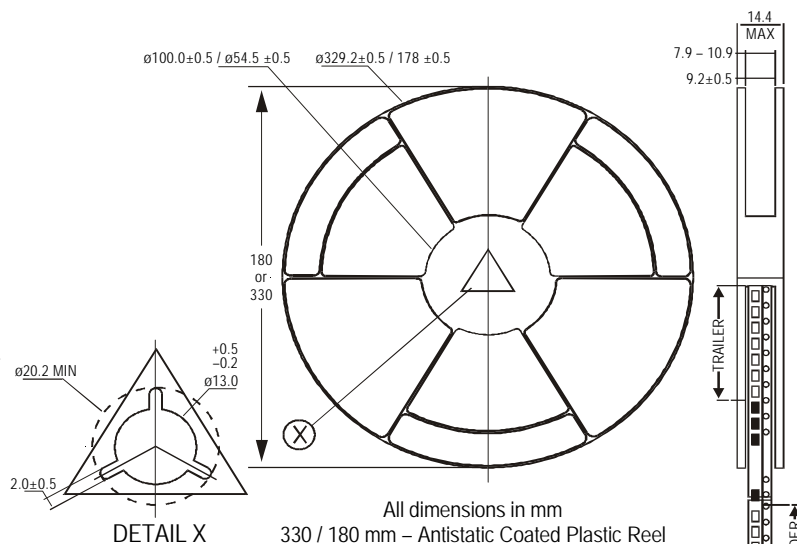
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$				
		CMBD2835 CMBD2836	35 75			V V
Reverse Voltage Leakage Current	I_R	CMBD2835 $V_R=30\text{V}$			100	nA
		CMBD2836 $V_R=50\text{V}$			100	nA
Diode Capacitance	C_T	$V_R=0\text{V}, f=1\text{MHz}$			4.0	pF
Forward Voltage	V_F	$I_F = 10\text{ mA}$			1.0	V
		$I_F = 50\text{ mA}$			1.0	V
		$I_F = 100\text{ mA}$			1.2	V
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}, i_{R(REC)}=1.0\text{ mA}$			4.0	ns

SOT-23
Formed SMD Package

SOT-23 Package Reel Information

Reel Specifications for W Packing (13") and 7"



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.

Technical drawing of a metal strip, showing a cross-section and a plan view with dimensions and tolerances.

Cross-section (Left):

- Overall width: 2.77 ± 0.10
- Inner width: 1.22 ± 0.1
- Inner width (MAX): 1.6
- Thickness: 0.3 ± 0.1

Plan View (Right):

- Overall width: 8.0 ± 0.1
- Distance from top edge to first row of holes: 1.75 ± 0.1
- Distance between rows of holes: 3.5 ± 0.05
- Distance from bottom edge to last row of holes: 5.75 (MAX)
- Distance between centers of holes (top row): 4.0 ± 0.1
- Distance between centers of holes (bottom row): 3.15 ± 0.10
- Distance from center line to first hole (top row): 2.0 ± 0.05
- Distance between holes (top row): 4.0 ± 0.1
- Distance from center line to last hole (top row): 1.55 ± 0.05
- Distance from center line to last hole (bottom row): 1.0 ± 0.05

Direction of Unreeling

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/reel	136 gm/3K pcs	3" x 7.5" x 7.5"	12 K	17" x 15" x 13.5"	192 K	12 kgs
			9" x 9" x 9"	51 K	19" x 19" x 19"	408 K	28 kgs
	10K/reel	415 gm/10K pcs	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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