

**SOT-23 Formed SMD Package**

**CMBD914**

*HIGH SPEED SWITCHING DIODE*

**Marking**

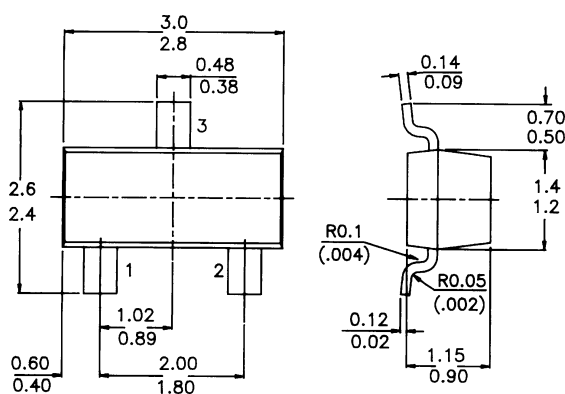
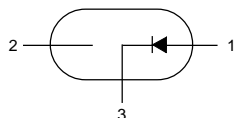
CMBD914 = 5D

**PACKAGE OUTLINE DETAILS**

ALL DIMENSIONS IN mm

**Pin configuration**

- 1 = ANODE
- 2 = NC
- 3 = CATHODE



**ABSOLUTE MAXIMUM RATINGS**

Continuous reverse voltage	$V_R$	75 V
Forward current	$I_F$	200 mA
Peak forward surge current	$I_{FM}(\text{surge})$	500 mA

**RATINGS** (at  $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Total Power Dissipation, $T_A = 25\text{ }^\circ\text{C}$	$P_d^*$	225 mW
Storage Temperature	$T_{stg}$	-55 to +150 $^\circ\text{C}$

**THERMAL RESISTANCE**

From junction to ambient	$R_{th\ j-a}$	556 $^\circ\text{C}/\text{W}$
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**CHARACTERISTICS** (at  $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Reverse breakdown voltage	$V_{BR}$	min.	100 V
$I_R = 100\ \mu\text{A}$			
Reverse voltage leakage current	$I_R$	max.	25 nA
$V_R = 20\ \text{V}$			
$V_R = 75\ \text{V}$	$I_R$	max.	5 $\mu\text{A}$

\*  $FR-5\ \text{Board} = 1.0 \times 0.75 \times 0.62\ \text{in.}$

## CMBD914

*Diode capacitance*

$$V_R = 0; f = 1 \text{ MHz}$$

$$C_D \quad \text{max.} \quad 4 \text{ pF}$$

*Forward voltage*

$$I_F = 10 \text{ mA}$$

$$V_F \quad \text{max.} \quad 1 \text{ V}$$

*Reverse recovery time*

$$I_F = I_R = 10 \text{ mA}$$

$$t_{rr} \quad \text{max.} \quad 4 \text{ nsec.}$$

### 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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