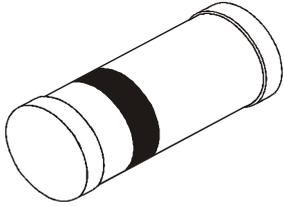


**HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODES**

**BAV101, BAV102  
BAV103**



**SOD - 80C  
Mini MELF (LL- 34 )**

**Fast Speed Switching Diodes**

**ABSOLUTE MAXIMUM RATINGS**

| DESCRIPTION   | SYMBOL    | BAV101       | BAV102 | BAV103 | UNIT             |
|---|-----------|--------------|--------|--------|------------------|
| Reverse Voltage   | $V_R$     | 100          | 150    | 200    | V                |
| Repetitive Peak Reverse Voltage   | $V_{RRM}$ | 120          | 200    | 250    | V                |
| Average Rectified Current, Half wave Rectification With Resistive Load and $f \geq 50\text{Hz}$ | $I_O$     | 200          |        |        | mA               |
| Peak Forward Surge Current $t=1\text{ s}$   | $I_{FSM}$ | 1.0          |        |        | A                |
| Power Dissipation up to $T_j=25^\circ\text{C}$  | $P_D$     | 300          |        |        | mW               |
| Operating Junction Storage Temperature Range  | $T_{stg}$ | - 65 to +175 |        |        | $^\circ\text{C}$ |

**THERMAL RESISTANCE**

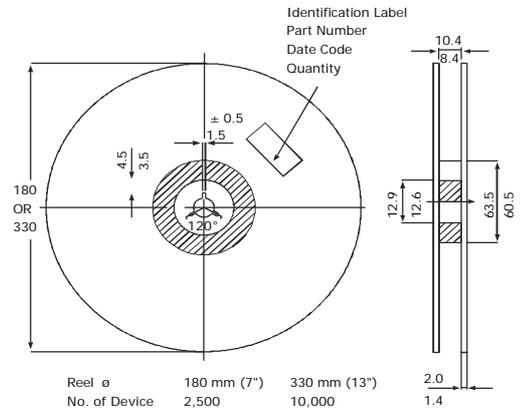
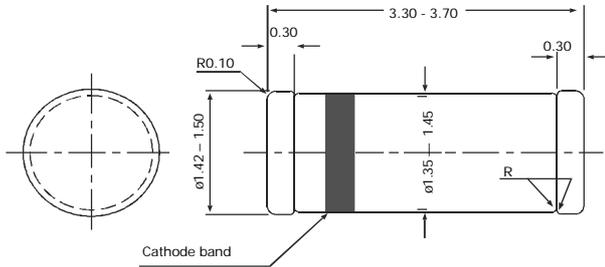
|                                 |               |     |                    |
|---------------------------------|---------------|-----|--------------------|
| Junction to Ambient in free air | $R_{th(j-a)}$ | 350 | $^\circ\text{C/W}$ |
|---------------------------------|---------------|-----|--------------------|

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

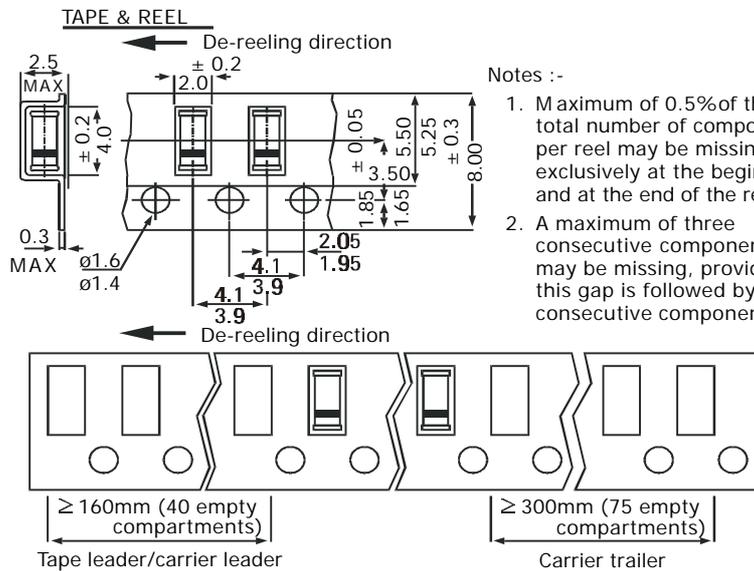
| DESCRIPTION           | SYMBOL   | TEST CONDITION  | MIN      | MAX  | UNIT |
|-----------------------|----------|---|----------|------|------|
| Forward Voltage       | $V_F$    | $I_F=100\text{mA}$  |          | 1.00 | V    |
| Reverse Current       | $I_R$    | $V_R=V_R\text{ max}$  |          | 100  | nA   |
| Junction Capacitance  | $C_J$    | $V_R=0\text{V}, f=1\text{MHz}$  | Typ 0.95 |      | pF   |
| Reverse Recovery Time | $t_{rr}$ | $I_F=10\text{mA}, \text{ to } I_R=1\text{mA}, V_R=6\text{V}$<br>$R_L=100\ \Omega$ |          | 75   | ns   |

BAV101\_103Rev\_1 210105E

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



**All dimensions are in mm**



**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/feel     | 100 gm/3K pcs  | 3" x 7.5" x 7.5" | 10.0K | 17" x 15" x 13.5" | 160.0K | 10 kgs |
|             | 10K/feel      | 400 gm/10K pcs | 13" x 13" x 0.5" | 10.0K | 17" x 15" x 13.5" | 300.0K | 15 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 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, 5141 1112 Fax + 91-11-2579 5290, 5141 1119  
email@cdil.com www.cdilsemi.com