



| ELECTRICAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified) |                                                                                           |           |          |      |      |      |               |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------|----------|------|------|------|---------------|
| PARAMETER                                                                                         | TEST CONDITION                                                                            | PART      | SYMBOL   | MIN. | TYP. | MAX. | UNIT          |
| Forward voltage                                                                                   | $I_F = 100\text{ mA}$                                                                     |           | $V_F$    |      |      | 1    | V             |
|                                                                                                   | $I_F = 200\text{ mA}$                                                                     |           | $V_F$    |      |      | 1.25 | V             |
| Repetitive peak reverse voltage                                                                   | $V_R = 100\text{ V}$                                                                      | BAV19WS-V | $I_R$    |      |      | 100  | nA            |
|                                                                                                   | $V_R = 100\text{ V}, T_J = 100\text{ }^{\circ}\text{C}$                                   | BAV20WS-V | $I_R$    |      |      | 15   | $\mu\text{A}$ |
|                                                                                                   | $V_R = 150\text{ V}$                                                                      | BAV21WS-V | $I_R$    |      |      | 100  | nA            |
|                                                                                                   | $V_R = 150\text{ V}, T_J = 100\text{ }^{\circ}\text{C}$                                   | BAV19WS-V | $I_R$    |      |      | 15   | $\mu\text{A}$ |
|                                                                                                   | $V_R = 200\text{ V}$                                                                      | BAV20WS-V | $I_R$    |      |      | 100  | nA            |
|                                                                                                   | $V_R = 200\text{ V}, T_J = 100\text{ }^{\circ}\text{C}$                                   | BAV21WS-V | $I_R$    |      |      | 15   | $\mu\text{A}$ |
| Dynamic forward resistance                                                                        | $I_F = 10\text{ mA}$                                                                      |           | $r_f$    |      | 5    |      | $\Omega$      |
| Diode capacitance                                                                                 | $V_R = 0, f = 1\text{ MHz}$                                                               |           | $C_D$    |      | 1.5  |      | pF            |
| Reverse recovery time                                                                             | $I_F = 30\text{ mA}, I_R = 30\text{ mA},$<br>$i_R = 3\text{ mA}, R_L = 100\text{ }\Omega$ |           | $t_{rr}$ |      |      | 50   | ns            |

## TYPICAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)

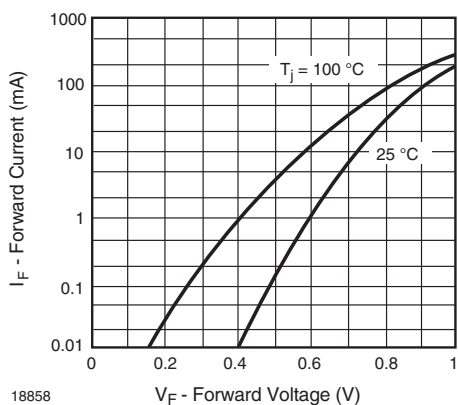


Fig. 1 - Forward Current vs. Forward Voltage

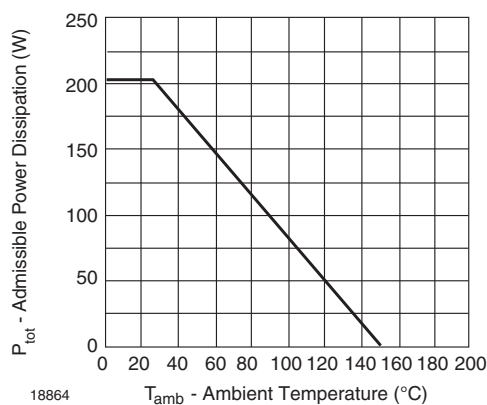


Fig. 3 - Admissible Power Dissipation vs. Ambient Temperature

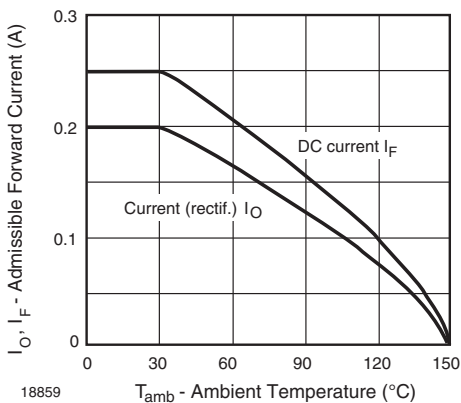


Fig. 2 - Admissible Forward Current vs. Ambient Temperature

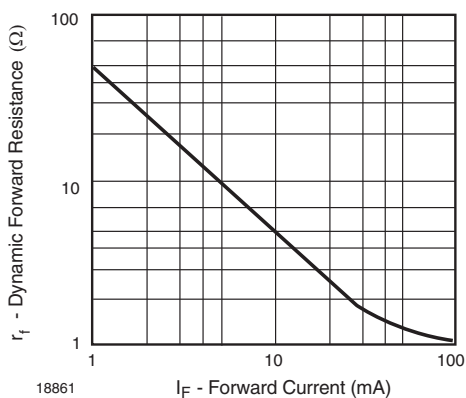


Fig. 4 - Dynamic Forward Resistance vs. Forward Current

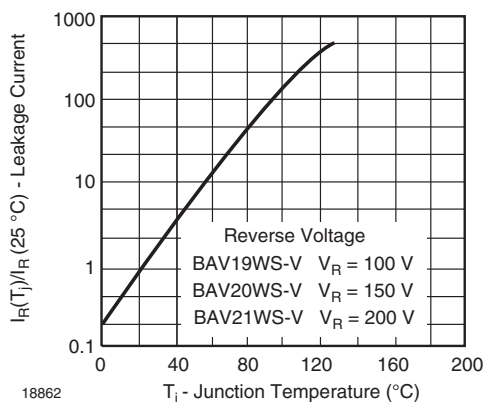


Fig. 5 - Leakage Current vs. Junction Temperature

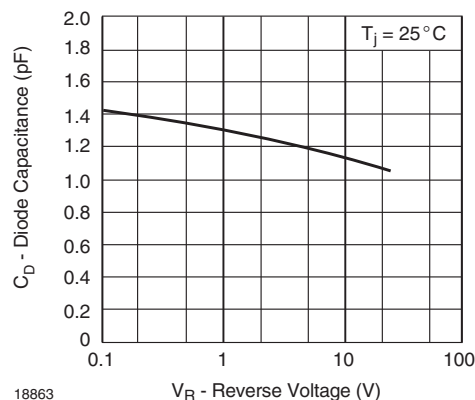
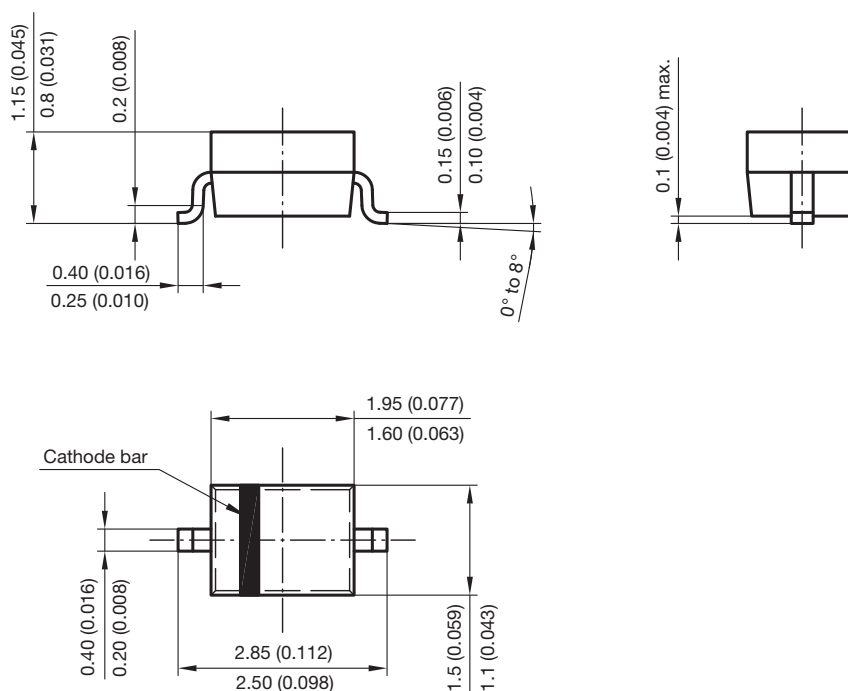
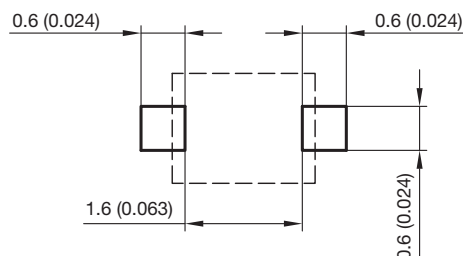


Fig. 6 - Capacitance vs. Reverse Voltage

## PACKAGE DIMENSIONS in millimeters (inches): SOD-323



Foot print recommendation:



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Created - Date: 24.August.2004

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17443



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