

## BAV19WS, BAV20WS, BAV21WS Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

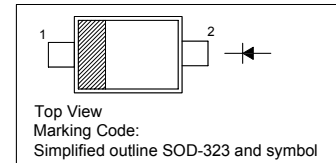
### Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion

|         | BAV19WS | BAV20WS | BAV21WS |
|---------|---------|---------|---------|
| MARKING | JX      | T2      | T3      |

### PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

| Parameter                                 | Symbol   | Value          | Unit              |                  |
|---|--|----------------|-------------------|------------------|
| Repetitive Peak Reverse Voltage           | BAV19WS<br>BAV20WS<br>BAV21WS                        | $V_{RRM}$      | 120<br>200<br>250 | V                |
| Reverse Voltage                           | BAV19WS<br>BAV20WS<br>BAV21WS                        | $V_R$          | 100<br>150<br>200 | V                |
| Average Rectified Forward Current         |  | $I_{F(AV)}$    | 200               | mA               |
| Forward Continuous Current                |  | $I_{FM}$       | 400               | mA               |
| Repetitive Peak Forward Current           |  | $I_{FRM}$      | 625               | mA               |
| Non-Repetitive Peak Forward Surge Current | at $t = 1\text{ }\mu\text{s}$<br>at $t = 1\text{ s}$ | $I_{FSM}$      | 2.5<br>0.5        | A                |
| Power Dissipation                         |  | $P_{tot}$      | 200               | mW               |
| Operating and Storage Temperature Range   |  | $T_j, T_{stg}$ | - 65 to + 150     | $^\circ\text{C}$ |

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter  | Symbol                        | Min.        | Max.              | Unit              |    |
|--|-------------------------------|-------------|-------------------|-------------------|----|
| Reverse Breakdown Voltage<br>at $I_R = 100\text{ }\mu\text{A}$   | BAV19WS<br>BAV20WS<br>BAV21WS | $V_{(BR)R}$ | 120<br>200<br>250 | -<br>-<br>-       | V  |
| Reverse Current<br>at $V_R = 100\text{ V}$<br>at $V_R = 150\text{ V}$<br>at $V_R = 200\text{ V}$         | BAV19WS<br>BAV20WS<br>BAV21WS | $I_R$       | -<br>-<br>-       | 100<br>100<br>100 | nA |
| Forward Voltage<br>at $I_F = 100\text{ mA}$<br>at $I_F = 200\text{ mA}$                                  |                               | $V_F$       | -<br>-            | 1<br>1.25         | V  |
| Total Capacitance<br>at $V_R = 0, f = 1\text{ MHz}$  |                               | $C_T$       | -                 | 5                 | pF |
| Reverse Recovery Time<br>at $I_F = I_R = 30\text{ mA}, I_{RR} = 0.1 \times I_R, R_L = 100\text{ }\Omega$ |                               | $t_{rr}$    | -                 | 50                | ns |

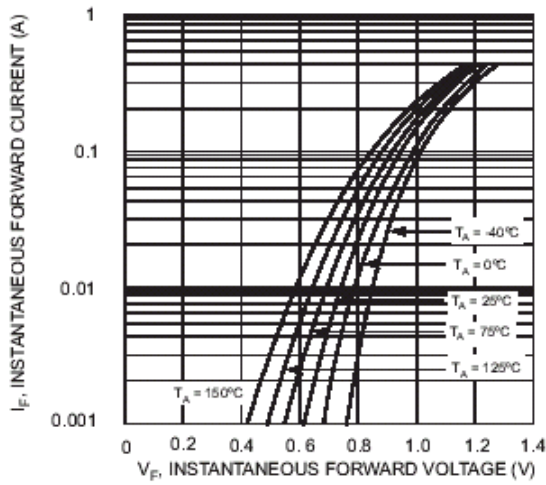


Fig. 1 Typical Forward Characteristics

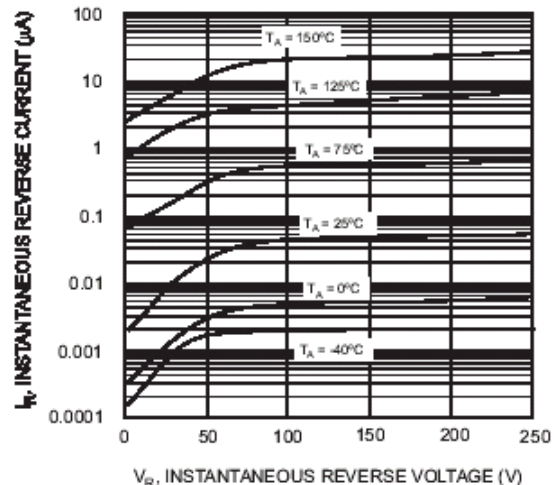


Fig. 2 Typical Reverse Characteristics

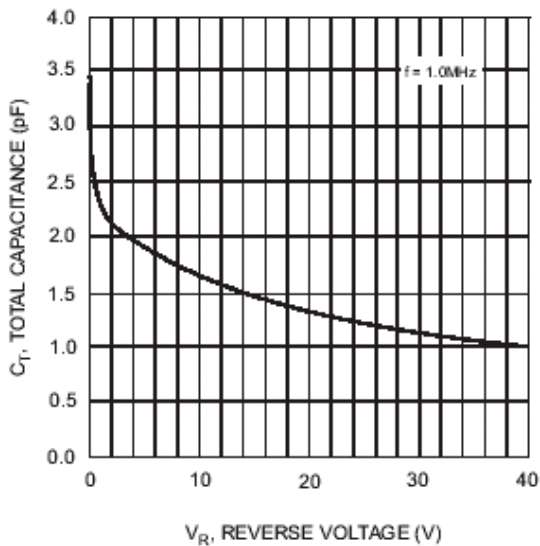


Fig. 3 Typical Capacitance vs. Reverse Voltage

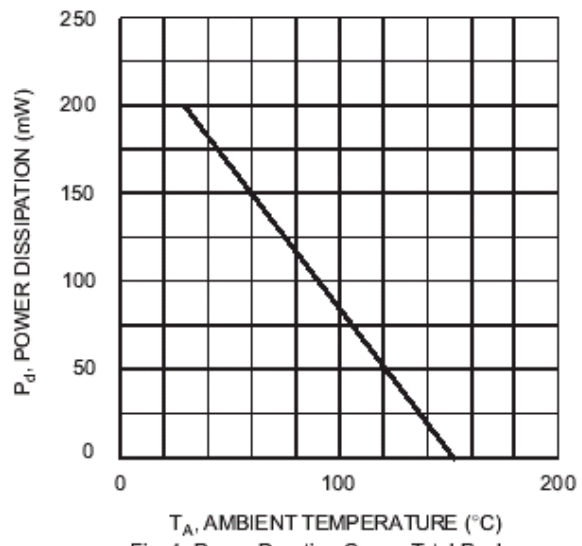
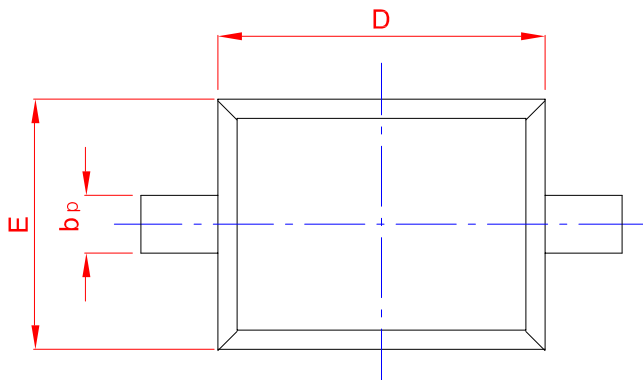
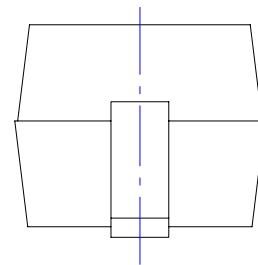
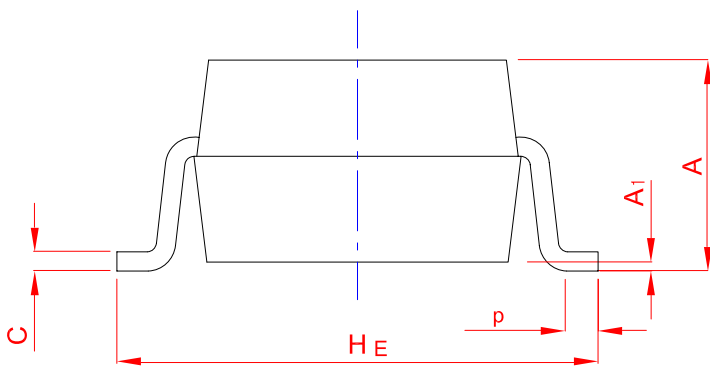
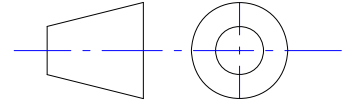


Fig. 4 Power Derating Curve, Total Package

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



| UNIT | A    | $b_p$ | C    | D    | E    | $H_E$ | $A_1$ | $L_p$ |
|------|------|-------|------|------|------|-------|-------|-------|
| mm   | 1.20 | 0.40  | 0.15 | 1.80 | 1.35 | 2.80  | 0.10  | 0.50  |
|      | 0.90 | 0.25  | 0.10 | 1.60 | 1.15 | 2.30  | 0.01  | 0.20  |

单击下面可查看定价，库存，交付和生命周期等信息

[>>TWGMC\(台湾迪嘉\)](#)