

# BAV21WS-BL-AH

## Silicon Epitaxial Planar Diodes

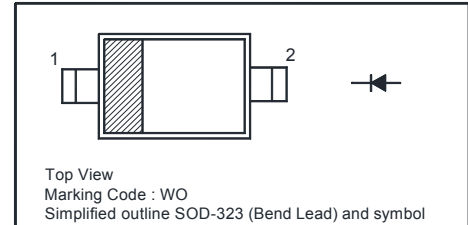
High Voltage Switching Diode

### Features

- AEC-Q101 is Available
- Halogen and Antimony Free(HAF), RoHS compliant

### PINNING

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

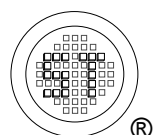


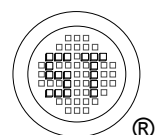
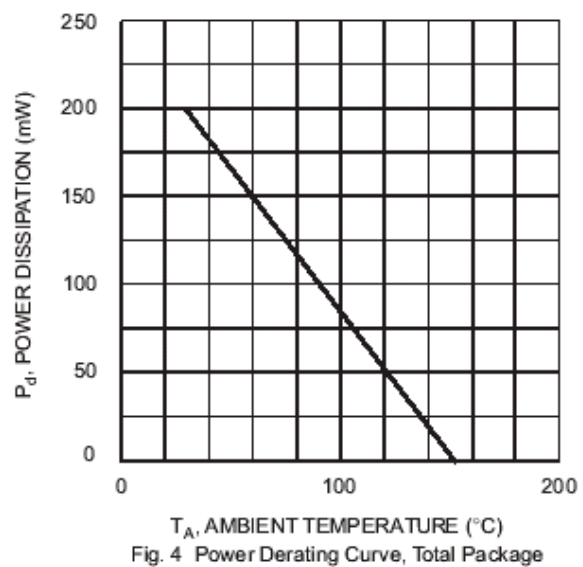
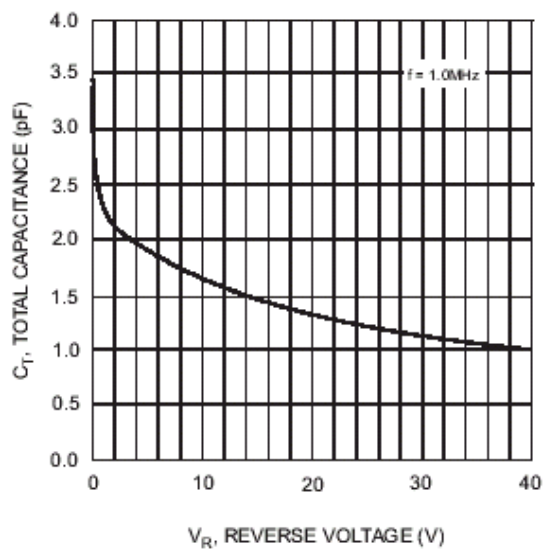
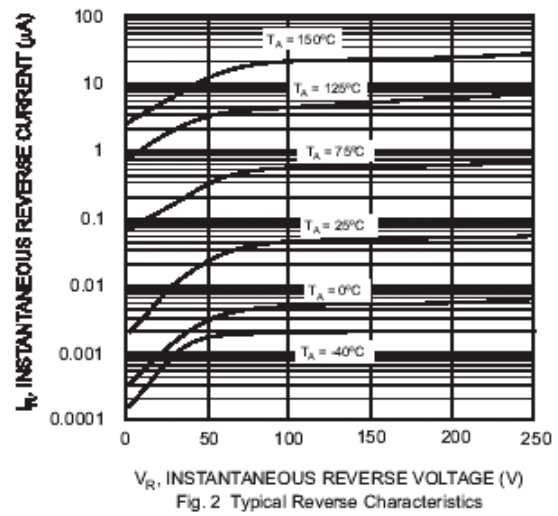
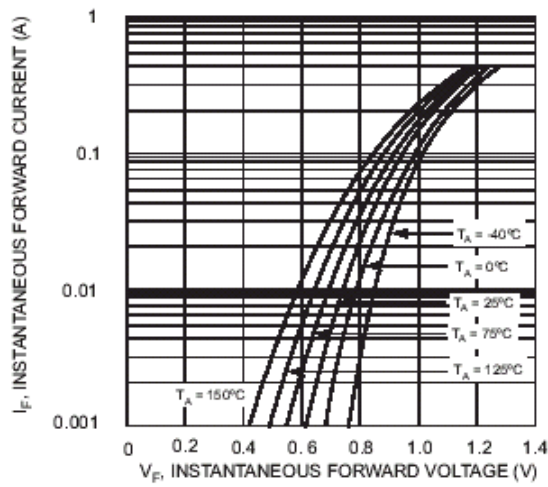
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                                 | Symbol         | Value         | Unit             |
|-------------------------------------------|----------------|---------------|------------------|
| Repetitive Peak Reverse Voltage           | $V_{RRM}$      | 250           | V                |
| Reverse Voltage                           | $V_R$          | 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 | $I_{FSM}$      | 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 $T_a = 25^\circ\text{C}$

| Parameter                                                                                          | Symbol      | Min.   | Max.      | Unit |
|----------------------------------------------------------------------------------------------------|-------------|--------|-----------|------|
| Reverse Breakdown Voltage<br>at $I_R = 100 \mu\text{A}$                                            | $V_{(BR)R}$ | 250    | -         | V    |
| Reverse Current<br>at $V_R = 200 \text{ V}$                                                        | $I_R$       | -      | 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 $I_F = I_R = 30 \text{ mA}, I_{RR} = 0.1 \times I_R, R_L = 100 \Omega$ | $t_{rr}$    | -      | 50        | ns   |



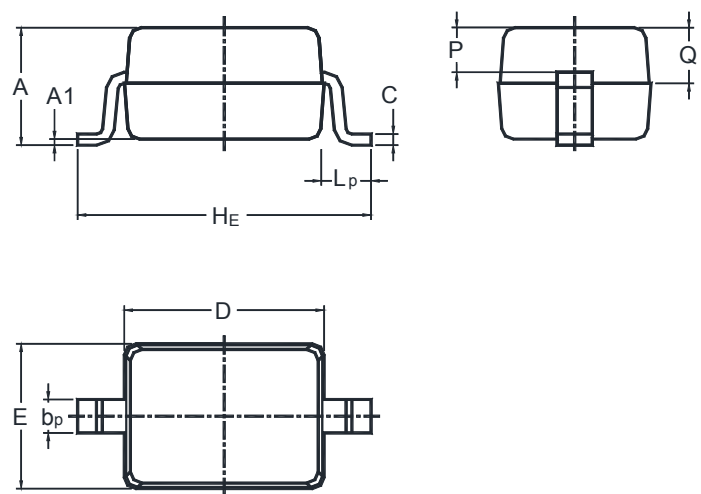


# BAV21WS-BL-AH

## PACKAGE OUTLINE

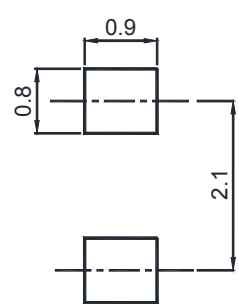
Plastic surface mounted package; 2 leads

SOD-323BL



| UNIT | A          | A <sub>1</sub> | b <sub>p</sub> | C            | D          | E            | H <sub>E</sub> | L <sub>p</sub> | Q          | P          |
|------|------------|----------------|----------------|--------------|------------|--------------|----------------|----------------|------------|------------|
| mm   | 1.1<br>0.8 | 0.1<br>0       | 0.4<br>0.25    | 0.18<br>0.09 | 1.8<br>1.6 | 1.35<br>1.15 | 2.8<br>2.3     | 0.5<br>0.1     | 0.5<br>0.3 | 0.4<br>0.3 |

## Recommended Soldering Footprint



## Packing information

| Package   | Tape Width (mm) | Pitch   |               | Reel Size |      | Per Reel Packing Quantity |
|-----------|-----------------|---------|---------------|-----------|------|---------------------------|
|           |                 | mm      | inch          | mm        | inch |                           |
| SOD-323BL | 8               | 4 ± 0.1 | 0.157 ± 0.004 | 178       | 7    | 3,000                     |

