

## FEATURES

- Average Rectified Output Current:  $I_O=200\text{ mA}$
- Power Dissipation of 250mw



## Package Marking and Ordering Information

| Product ID | Pack    | Marking | Qty(PCS) |
|------------|---------|---------|----------|
| BAV19WS    | SOD-323 | A8      | 3000     |
| BAV20WS    | SOD-323 | T2      | 3000     |
| BAV21WS    | SOD-323 | T3      | 3000     |

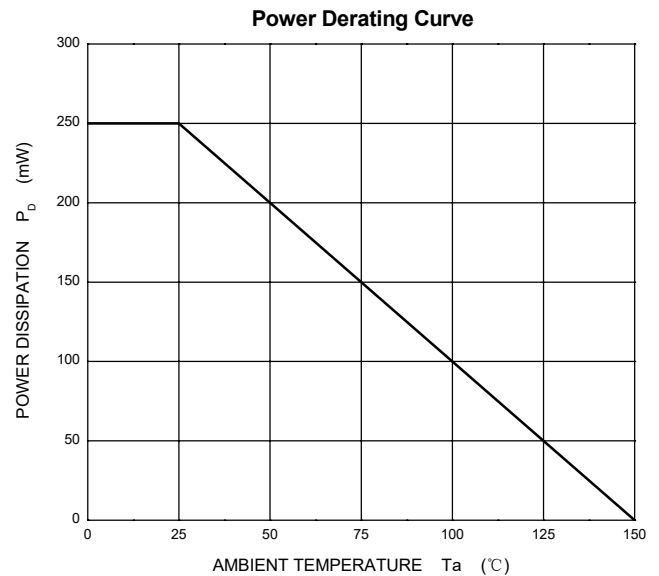
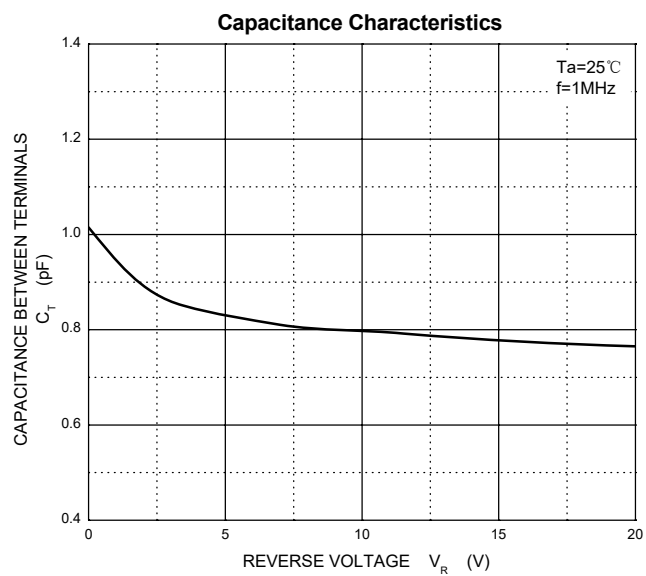
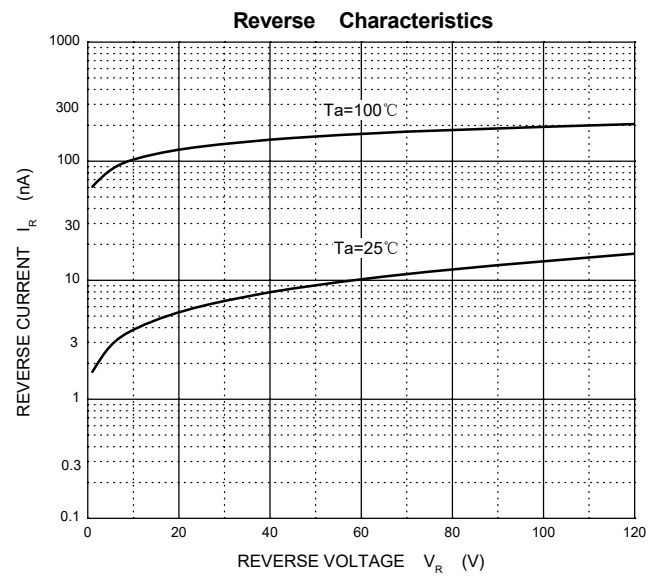
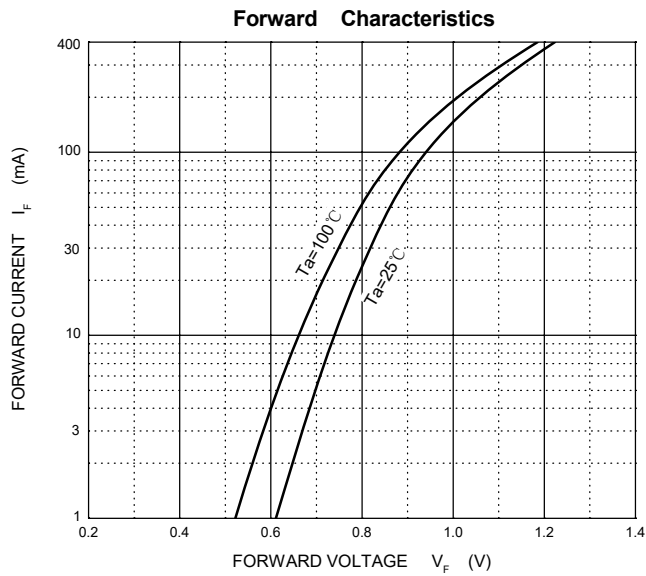
## MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

| Symbol          | Parameter                                                    | Value         |         |         | Unit               |
|-----------------|--------------------------------------------------------------|---------------|---------|---------|--------------------|
|                 |                                                              | BAV19WS       | BAV20WS | BAV21WS |                    |
| $V_{RM}$        | Non-Repetitive Peak Reverse Voltage                          | 120           | 200     | 250     | V                  |
| $V_{RRM}$       | Peak Repetitive Reverse Voltage                              | 100           | 150     | 200     | V                  |
| $V_{RWM}$       | Working Peak Reverse Voltage                                 |               |         |         |                    |
| $V_{R(RMS)}$    | RMS Reverse Voltage                                          | 71            | 106     | 141     | V                  |
| $I_O$           | Average Rectified Output Current                             | 200           |         |         | mA                 |
| $I_{FSM}$       | Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | 2.0           |         |         | A                  |
| $I_{FRM}$       | Repetitive Peak Forward Surge Current                        | 625           |         |         | mA                 |
| $P_D$           | Power Dissipation                                            | 250           |         |         | mW                 |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient                  | 500           |         |         | $^\circ\text{C/W}$ |
| $T_J, T_{stg}$  | Operation Junction and Storage Temperature Range             | $-55\sim+150$ |         |         | $^\circ\text{C}$   |

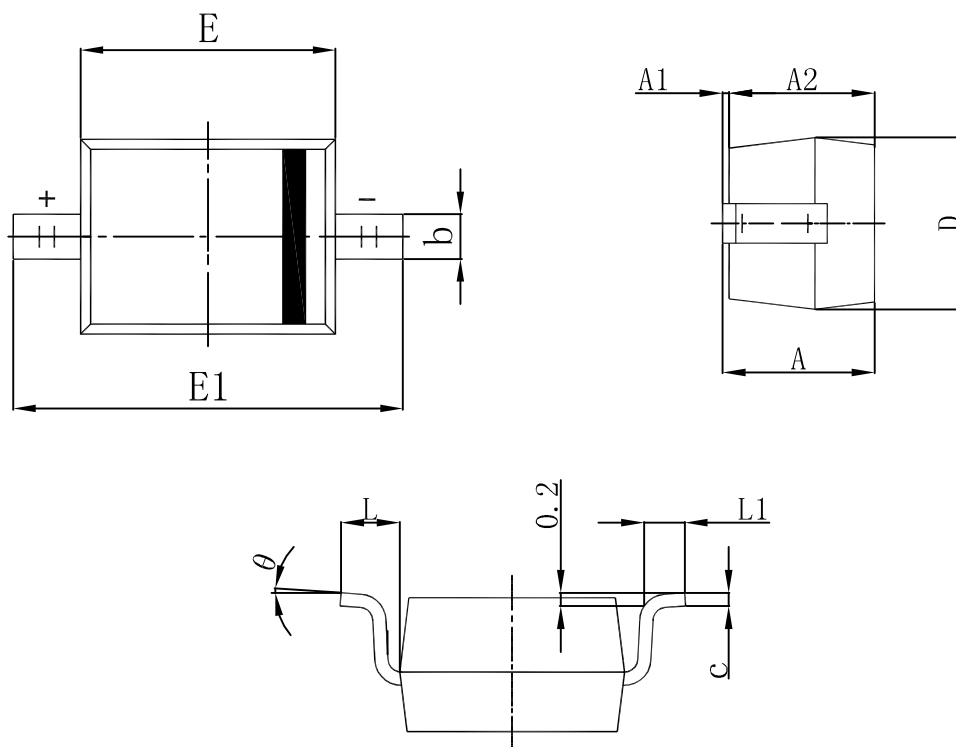
## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter             | Symbol    | Test conditions                                     |         | Min | Typ | Max  | Unit          |
|-----------------------|-----------|-----------------------------------------------------|---------|-----|-----|------|---------------|
| Reverse current       | $I_R$     | $V_R=100\text{V}$                                   | BAV19WS |     |     | 0.1  | $\mu\text{A}$ |
|                       |           | $V_R=150\text{V}$                                   | BAV20WS |     |     | 0.1  |               |
|                       |           | $V_R=200\text{V}$                                   | BAV21WS |     |     | 0.1  |               |
| Forward voltage       | $V_F$     | $I_F=100\text{mA}$                                  |         |     |     | 1    | V             |
|                       |           | $I_F=200\text{mA}$                                  |         |     |     | 1.25 |               |
| Total capacitance     | $C_{tot}$ | $V_R=0\text{V}, f=1\text{MHz}$                      |         |     |     | 5    | pF            |
| Reverse recovery time | $t_{rr}$  | $I_F=I_R=30\text{mA}, I_{rr}=0.1I_R, R_L=100\Omega$ |         |     |     | 50   | ns            |

## Typical Characteristics



### SOD-323 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      |                           | 1.100 |                      | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.800                     | 1.000 | 0.031                | 0.039 |
| b      | 0.250                     | 0.350 | 0.010                | 0.014 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E      | 1.600                     | 1.800 | 0.063                | 0.071 |
| E1     | 2.500                     | 2.750 | 0.098                | 0.108 |
| L      | 0.475 REF                 |       | 0.019 REF            |       |
| L1     | 0.250                     | 0.400 | 0.010                | 0.016 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |