



## Features

- Forward Continuous Current:  $I_F = 70\text{mA}$
- Power Dissipation of 200mW



SOD-323



## Package Marking and Ordering Information

| Product ID | Pack    | Marking | Qty(PCS) |
|------------|---------|---------|----------|
| BAS70WX    | SOD-323 | K73     | 3000     |

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

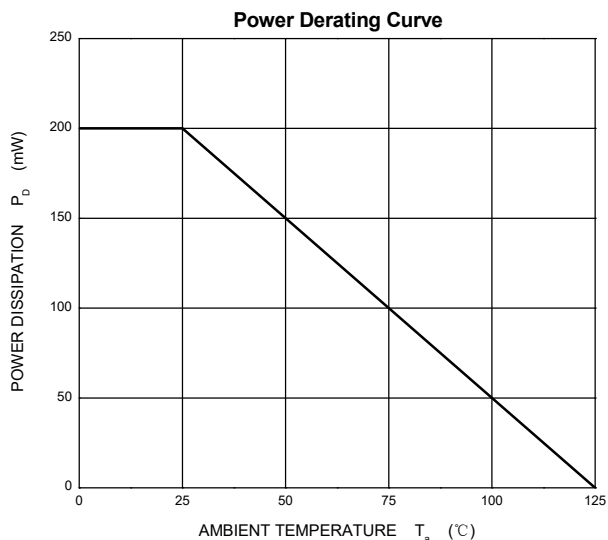
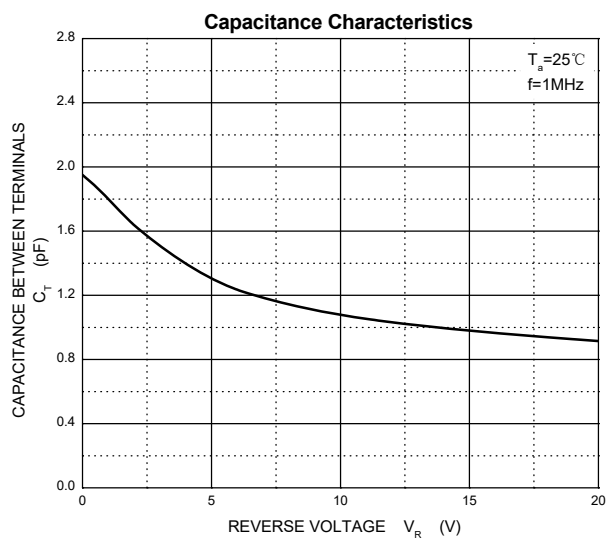
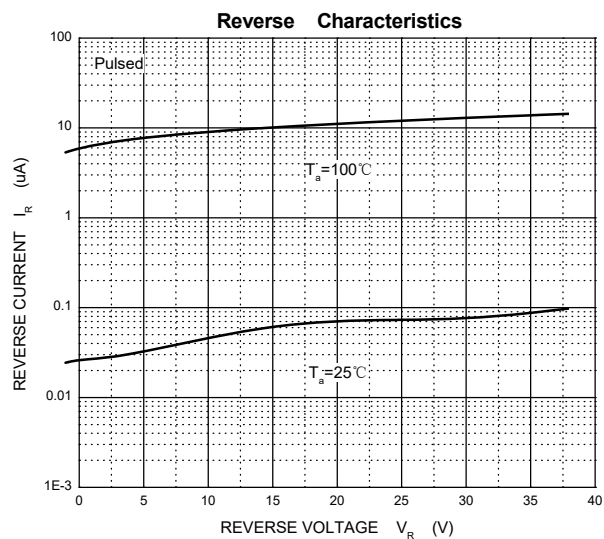
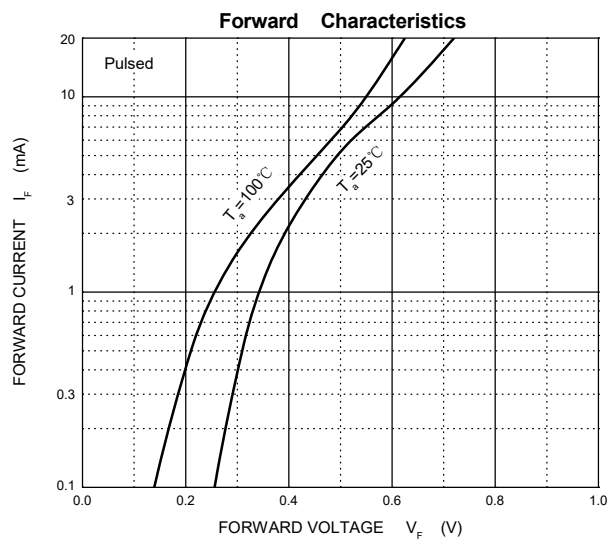
| Parameter                                                         | Symbol          | Limit           | Unit               |
|-------------------------------------------------------------------|-----------------|-----------------|--------------------|
| Peak Repetitive Peak Reverse Voltage                              | $V_{RRM}$       | 70              | V                  |
| Working Peak Reverse Voltage                                      | $V_{RWM}$       |                 |                    |
| DC Blocking Voltage                                               | $V_R$           |                 |                    |
| Forward Continuous Current                                        | $I_F$           | 70              | mA                 |
| Non-repetitive Peak Forward Surge Current<br>@ $t = 8.3\text{ms}$ | $I_{FSM}$       | 100             | mA                 |
| Power Dissipation                                                 | $P_D$           | 200             | mW                 |
| Thermal Resistance from Junction to Ambient                       | $R_{\theta JA}$ | 500             | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range                              | $T_J$           | $-40 \sim +125$ | $^\circ\text{C}$   |
| Storage Temperature Range                                         | $T_{STG}$       | $-55 \sim +150$ | $^\circ\text{C}$   |

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

| Parameter                     | Symbol   | Min | Typ | Max  | Unit | Conditions                                                       |
|-------------------------------|----------|-----|-----|------|------|------------------------------------------------------------------|
| Forward voltage               | $V_{F1}$ |     |     | 0.41 | V    | $I_F = 1\text{mA}$                                               |
|                               | $V_{F2}$ |     |     | 1    | V    | $I_F = 15\text{mA}$                                              |
| Reverse current               | $I_R$    |     |     | 100  | nA   | $V_R = 50\text{V}$                                               |
| Capacitance between terminals | $C_T$    |     |     | 2    | pF   | $V_R = 0\text{V}, f = 1\text{MHz}$                               |
| Reverse recovery time         | $t_{rr}$ |     |     | 5    | ns   | $I_F = I_R = 10\text{mA}$<br>$I_{rr} = 0.1 I_R, R_L = 100\Omega$ |

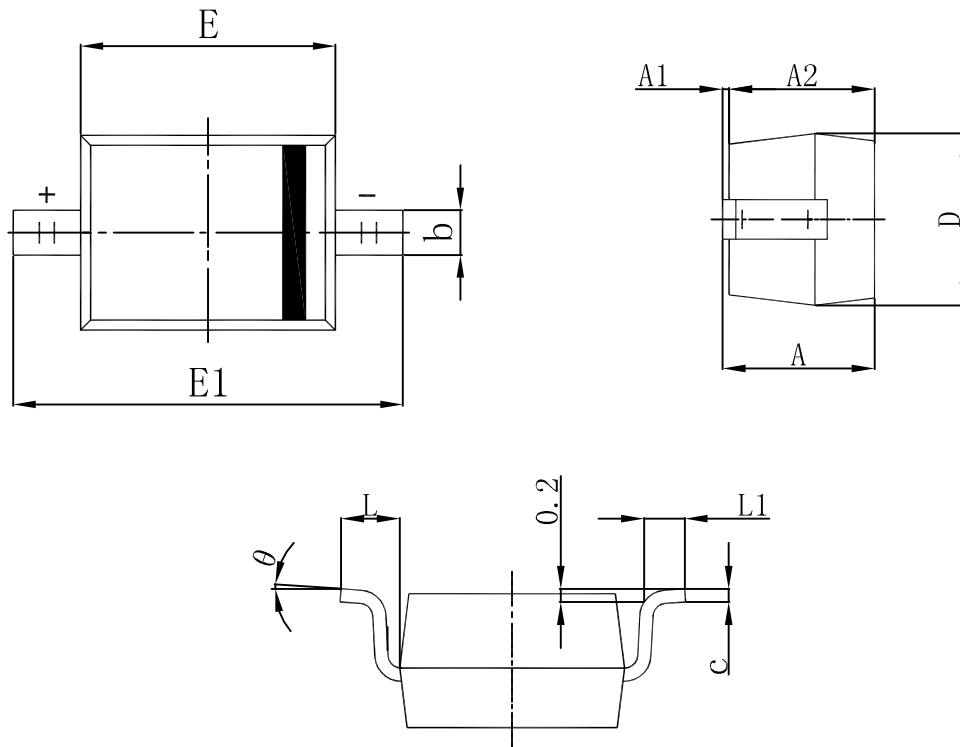


## Typical Characteristics





### 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 |
| $\theta$ | 0°                        | 8°    | 0°                   | 8°    |



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