



## Features

- Average Rectified Output Current:  $I_O=150\text{mA}$
- Power Dissipation of 200mw

## Package Marking and Ordering Information

| Product ID     | Pack    | Marking | Qty(PCS) |
|----------------|---------|---------|----------|
| 1N4148WS-E3-08 | SOD-323 | T4      | 3000     |



SOD-323



## Maxmim Ratings ( $T_a=25$ unless otherwise noted)

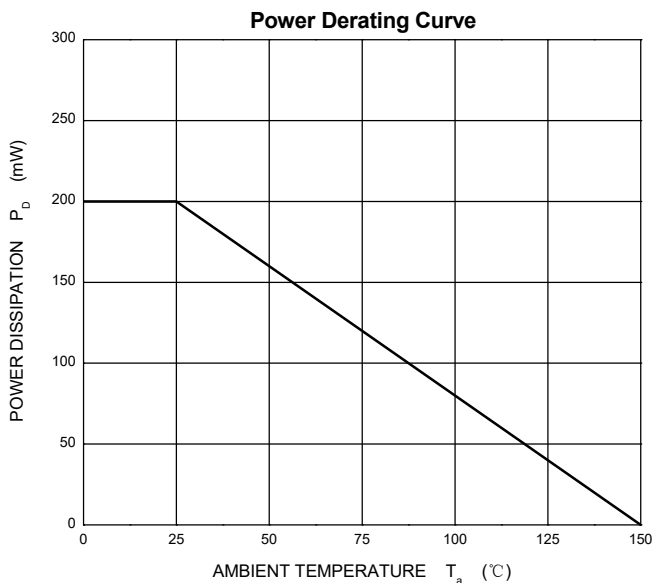
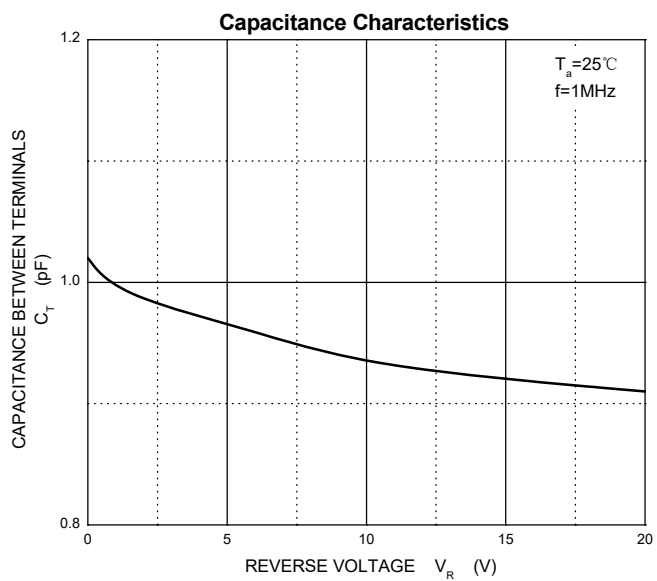
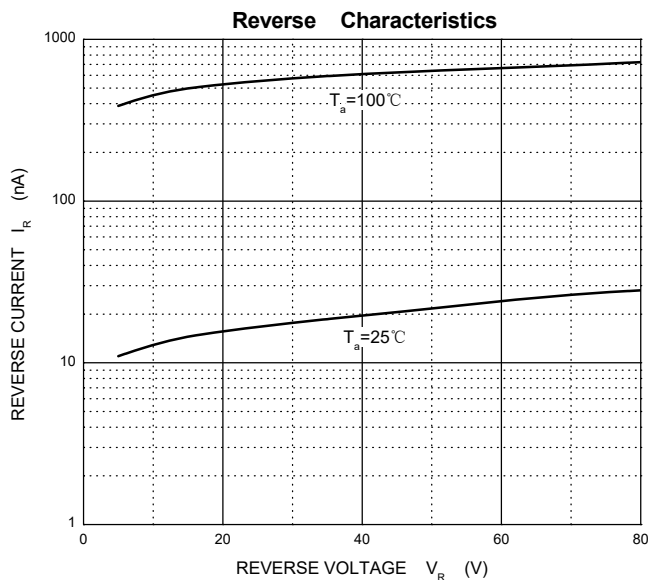
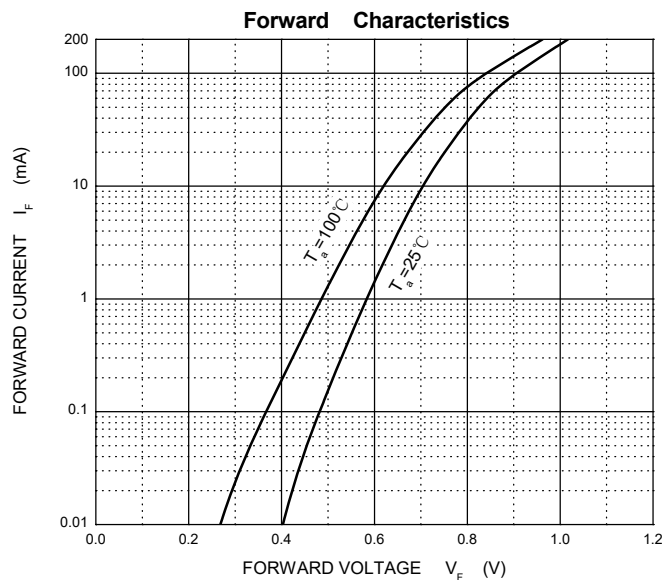
| Parameter                                                                                   | Symbol                          | Limit    | Unit                 |
|---------------------------------------------------------------------------------------------|---------------------------------|----------|----------------------|
| Non-Repetitive Peak Reverse Voltage                                                         | $V_{RM}$                        | 100      | V                    |
| Peak Repetitive Peak Reverse Voltage Working<br>Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 100      | V                    |
| RMS Reverse Voltage                                                                         | $V_{R(RMS)}$                    | 71       | V                    |
| Forward Continuous Current                                                                  | $I_{FM}$                        | 300      | mA                   |
| Average Rectified Output Current                                                            | $I_O$                           | 150      | mA                   |
| Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$                                | $I_{FSM}$                       | 2.0      | A                    |
| Power Dissipation                                                                           | $P_d$                           | 200      | mW                   |
| Thermal Resistance from Junction to Ambient                                                 | $R_{\theta JA}$                 | 625      | $^{\circ}\text{C/W}$ |
| Operation Junction and Storage Temperature Range                                            | $T_J, T_{STG}$                  | -55~+150 | $^{\circ}\text{C}$   |

## Electrcal Characteristics ( $T_a=25$ unless otherwise specified)

| Parameter                     | Symbol   | Min | Typ | Max   | Unit          | Conditions                                                |
|-------------------------------|----------|-----|-----|-------|---------------|-----------------------------------------------------------|
| Forward voltage               | $V_{F1}$ |     |     | 0.715 | V             | $I_F=1\text{mA}$                                          |
|                               | $V_{F2}$ |     |     | 0.855 | V             | $I_F=10\text{mA}$                                         |
|                               | $V_{F3}$ |     |     | 1.0   | V             | $I_F=50\text{mA}$                                         |
|                               | $V_{F4}$ |     |     | 1.25  | V             | $I_F=150\text{mA}$                                        |
| Reverse current               | $I_{R1}$ |     |     | 1     | $\mu\text{A}$ | $V_R=75\text{V}$                                          |
|                               | $I_{R2}$ |     |     | 25    | nA            | $V_R=20\text{V}$                                          |
| Capacitance between terminals | $C_T$    |     |     | 2     | pF            | $V_R=0\text{V}, f=1\text{MHz}$                            |
| Reverse recovery time         | $t_{rr}$ |     |     | 4     | ns            | $I_F=I_R=10\text{mA}$<br>$I_{rr}=0.1X I_R, R_L=100\Omega$ |

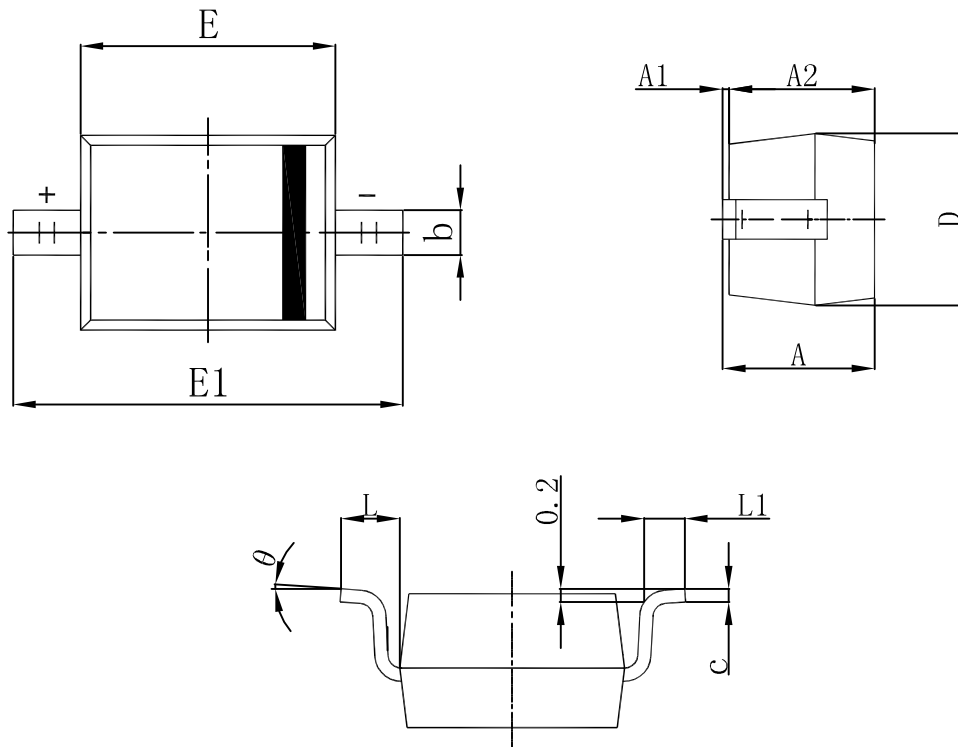


## Typical Characteristics





### 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 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |



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