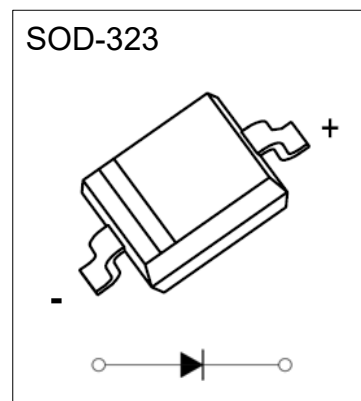


## ■ Features

- High Current Capability
- Low Forward Voltage Drop

## ■ Mechanical Data

- package:SOD-323
- Polarity: Color band denotes cathode end
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any.



## ■ Ordering Information

| Part Number | Package | Marking | Packing     | Quantity per reel | Reel Size |
|-------------|---------|---------|-------------|-------------------|-----------|
| BAT54WS     | SOD-323 | L9      | Tape & Reel | 3000 PCS          | 7 inches  |

## ■ Maximum Ratings & Thermal Characteristics(Ratings at 25°C ambient temperature unless otherwise specified.)

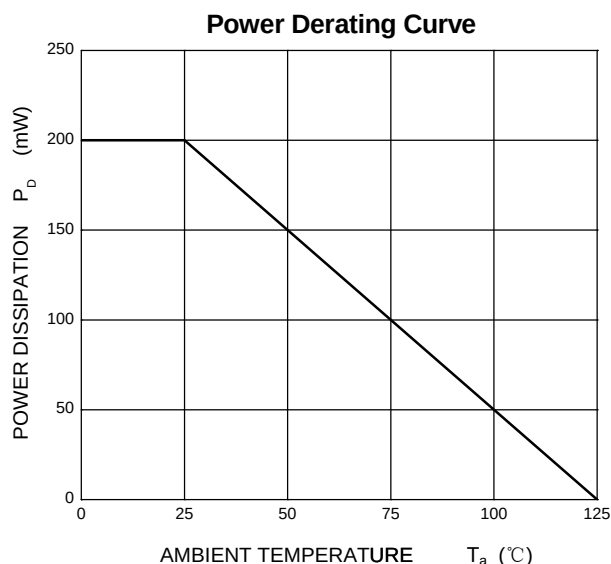
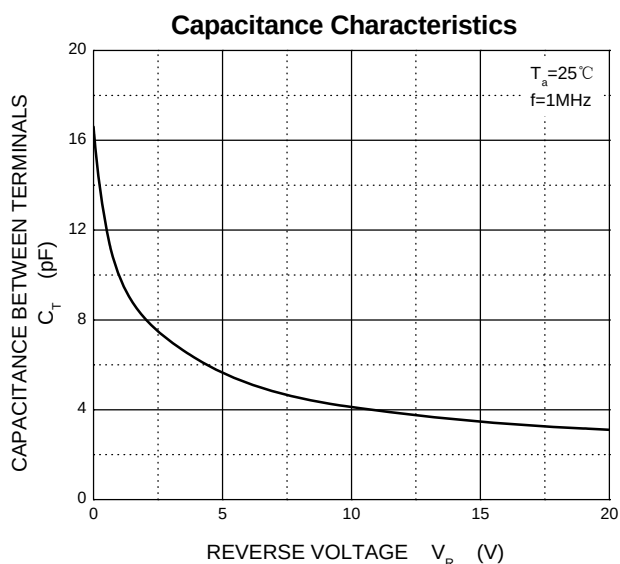
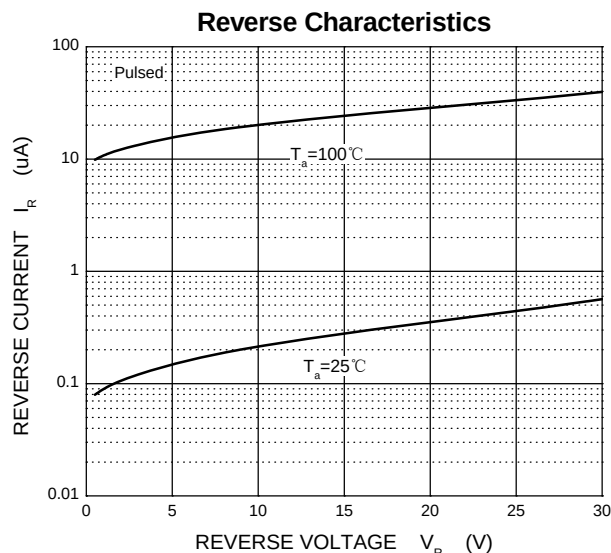
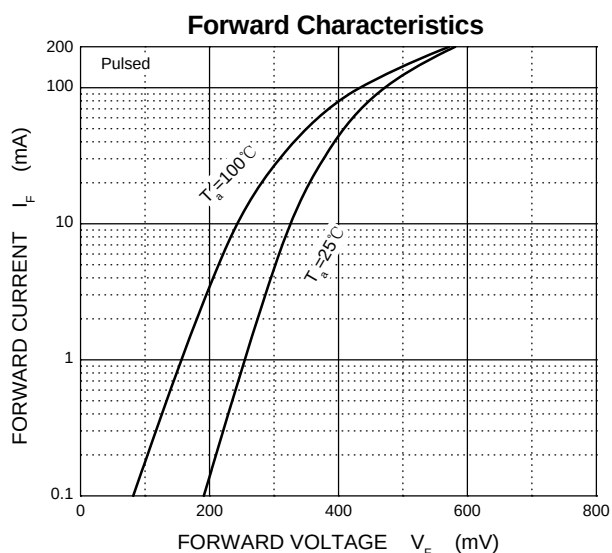
| Parameters                                              | Symbol | Limit    | Unit |
|---------------------------------------------------------|--------|----------|------|
| Maximum repetitive peak reverse voltage                 | VRRM   | 30       | V    |
| Maximum RMS voltage                                     | VRMS   | 21       | V    |
| Maximum DC blocking voltage                             | VDC    | 30       | V    |
| Maximum average forward rectified current               | IFM    | 300      | mA   |
| Peak forward surge current 8.3 ms single half sine-wave | IFSM   | 600      | mA   |
| Typical thermal resistance                              | RθJA   | 500      | °C/W |
| Power Dissipation                                       | PD     | 200      | mW   |
| Junction Temperature                                    | TJ     | 125      | °C   |
| Storage temperature range                               | TSTG   | -50-+150 | °C   |



■ **Electrical Characteristics**(Ratings at 25℃ ambient temperature unless otherwise specified)

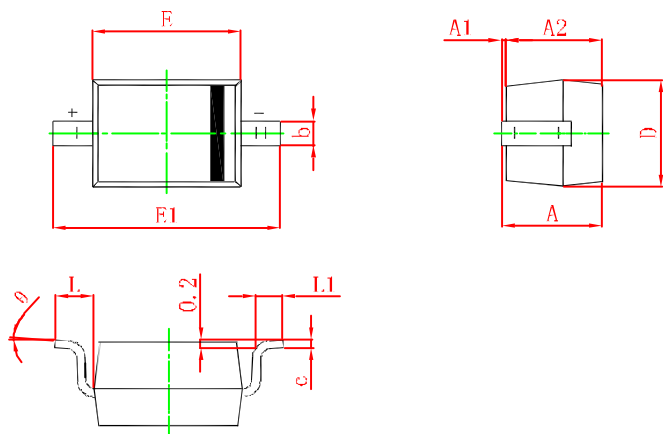
| Parameters                        | Symbol | Test conditions            | Min | Typ | Max  | Unit |
|-----------------------------------|--------|----------------------------|-----|-----|------|------|
| Maximum forward voltage           | VF1    | IF = 0.1mA                 |     |     | 240  | mV   |
|                                   | VF2    | IF = 1.0mA                 |     |     | 320  |      |
|                                   | VF3    | IF = 10mA                  |     |     | 400  |      |
|                                   | VF4    | IF = 30mA                  |     |     | 500  |      |
|                                   | VF5    | IF = 100mA                 |     |     | 1000 |      |
| Maximum reverse breakdown voltage | VR     | IR=100uA                   | 30  |     |      | V    |
| Maximum reverse current           | IR     | VR=25V                     |     |     | 2.0  | uA   |
| Type junction capacitance         | Cj     | VR = 1.0V, f = 1MHz        |     |     | 10   | pF   |
| Reverse Recovery Time             | Trr    | IF=10mA, VR=6V,<br>IR=10mA |     |     | 6    | nS   |

■ **Typical Characteristics**





## ■ SOD-323 Package Outline Dimensions



| Symbol | Min.(mm) | Max.(mm) |
|--------|----------|----------|
| A      |          | 1.000    |
| A1     | 0.000    | 0.100    |
| A2     | 0.800    | 0.900    |
| b      | 0.250    | 0.350    |
| c      | 0.080    | 0.150    |
| D      | 1.200    | 1.400    |
| E      | 1.600    | 1.800    |
| E1     | 2.500    | 2.700    |
| L      | 0.475REF |          |
| L1     | 0.250    | 0.400    |
| θ      | 0°       | 8°       |