

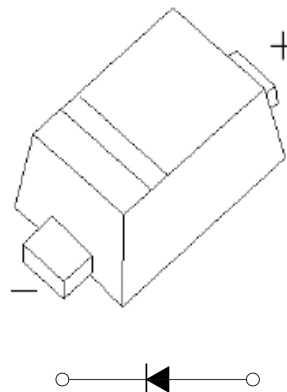
## ■ Features

- Small surface mounting type
- High Current Capability
- Low reverse current and low forward voltage
- High reliability

## ■ Mechanical Data

- package:SOD-523
- Polarity: Color band denotes cathode end
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any.

SOD-523



## ■ Ordering Information

| Part Number | Package | Marking | Packing     | Quantity per reel | Reel Size |
|-------------|---------|---------|-------------|-------------------|-----------|
| RB521S-30   | SOD-523 | C       | Tape & Reel | 3000 PCS          | 7 inches  |

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

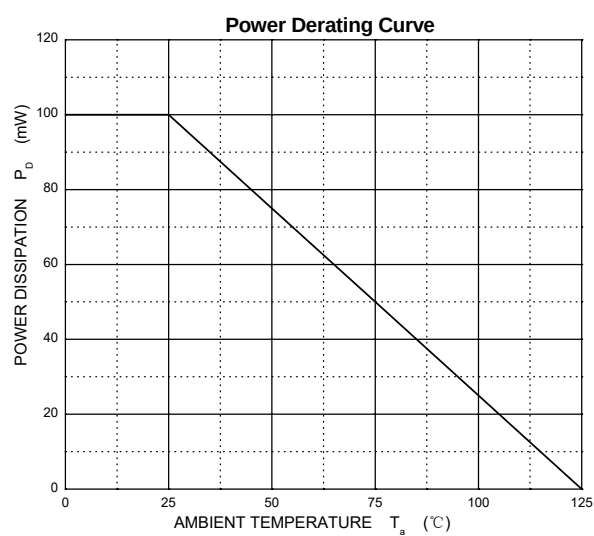
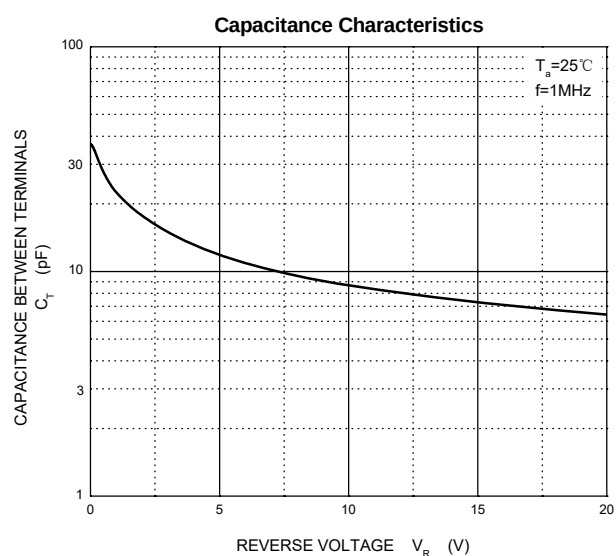
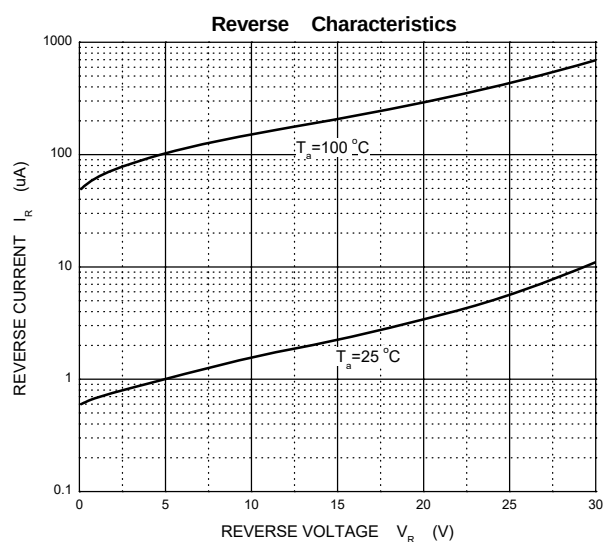
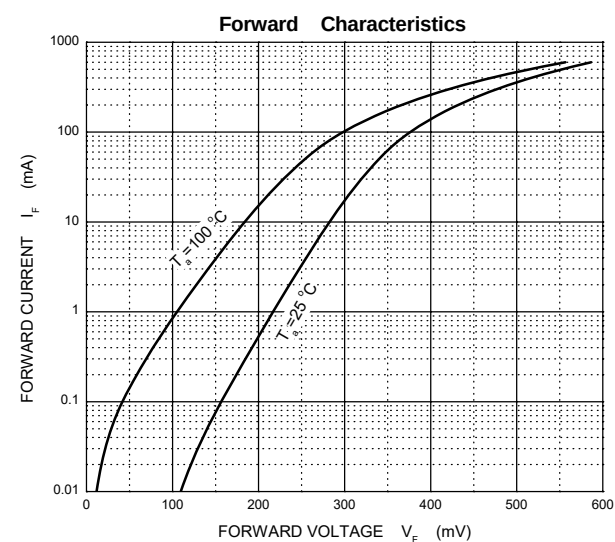
| Parameters                                              | Symbol | Limit    | Unit |
|---------------------------------------------------------|--------|----------|------|
| Peak reverse voltage                                    | VRM    | 30       | V    |
| DC reverse voltage                                      | VR     | 30       | V    |
| Mean rectifying current                                 | Io     | 0.2      | A    |
| Peak forward surge current 8.3 ms single half sine-wave | IFSM   | 1.0      | A    |
| Typical thermal resistance                              | RθJA   | 667      | °C/W |
| Power Dissipation                                       | PD     | 150      | mW   |
| Storage temperature range                               | TSTG   | -50-+150 | °C   |

## ■ Electrical Characteristics(Ratings at 25 °C ambient temperature unless otherwise specified)

| Parameters                        | Symbol | Test conditions         | Min | Typ | Max          | Unit |
|-----------------------------------|--------|-------------------------|-----|-----|--------------|------|
| Maximum forward voltage           | VF     | IF = 10mA<br>IF = 200mA |     |     | 0.35<br>0.50 | V    |
| Maximum reverse breakdown voltage | VR     | IR=1mA                  | 30  |     |              | V    |
| Maximum reverse current           | IR     | VR=10V                  |     |     | 30           | uA   |

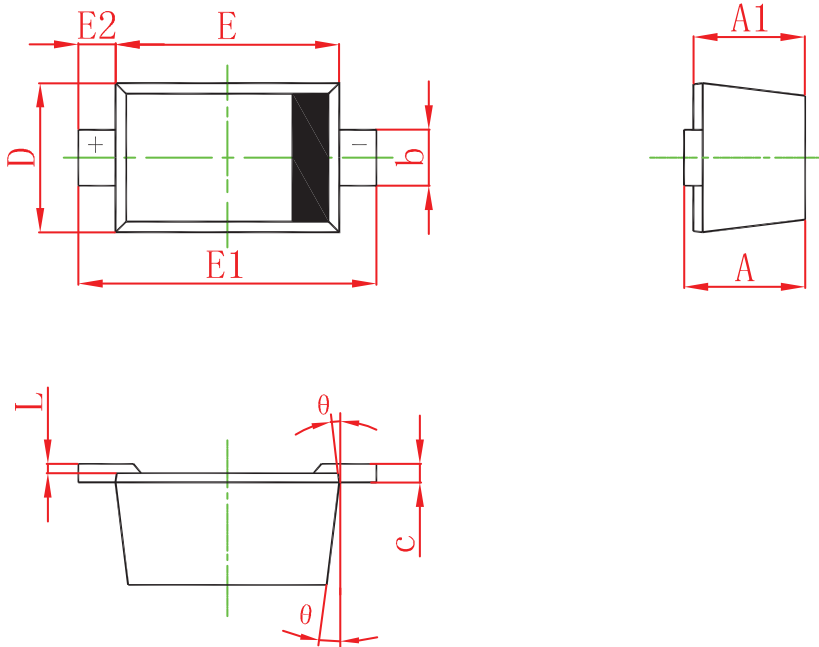


## ■ Typical Characteristics





### ■ SOD-523 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.510                     | 0.770 | 0.020                | 0.031 |
| A1     | 0.500                     | 0.700 | 0.020                | 0.028 |
| b      | 0.250                     | 0.350 | 0.010                | 0.014 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 0.750                     | 0.850 | 0.030                | 0.033 |
| E      | 1.100                     | 1.300 | 0.043                | 0.051 |
| E1     | 1.500                     | 1.700 | 0.059                | 0.067 |
| E2     | 0.200 REF                 |       | 0.008 REF            |       |
| L      | 0.010                     | 0.070 | 0.001                | 0.003 |
| θ      | 7° REF                    |       | 7° REF               |       |