



## Features

Small surface mounting type.

Low reverse current.

High reliability.



SOD-523



## Package Marking and Ordering Information

| Product ID        | Pack    | Marking | Qty(PCS) |
|-------------------|---------|---------|----------|
| RB520S30_R1_00001 | SOD-523 | B       | 3000     |

## Maximum Ratings (Ta=25°C unless otherwise noted)

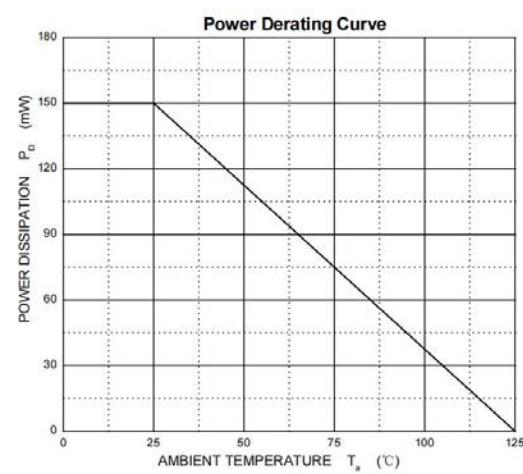
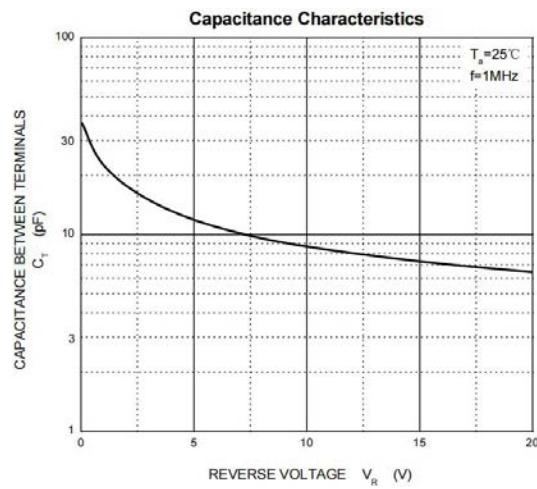
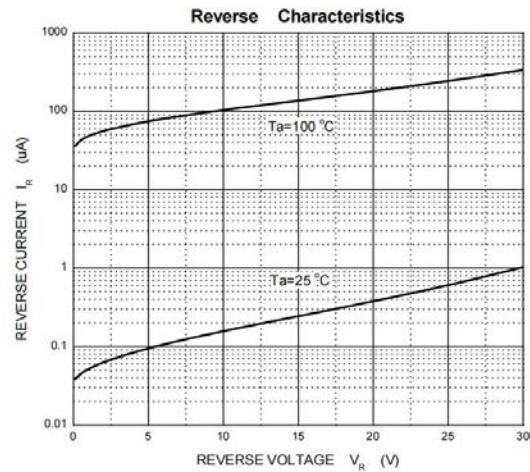
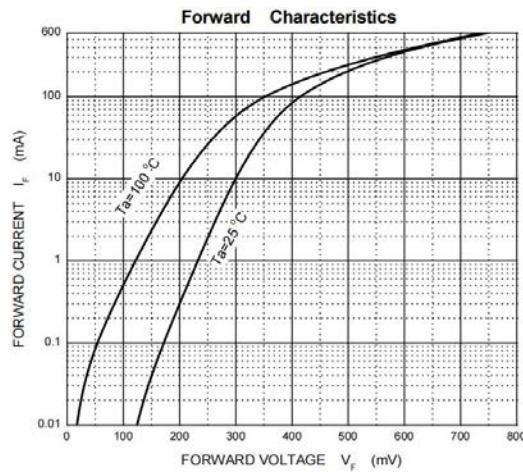
| Symbol           | Parameter                                       | Value    | Unit |
|------------------|---|----------|------|
| V <sub>R</sub>   | DC reverse voltage                              | 30       | V    |
| I <sub>o</sub>   | Mean rectifying current                         | 200      | mA   |
| I <sub>FSM</sub> | Non-repetitive Peak Forward Surge Current@8.3mS | 1000     | mA   |
| P <sub>d</sub>   | Power Dissipation                               | 150      | mW   |
| R <sub>θJA</sub> | Thermal Resistance From Junction To Ambient     | 667      | °C/W |
| T <sub>J</sub>   | Operation Junction Temperature Range            | -40~+125 | °C   |
| T <sub>STG</sub> | Storage Temperature Range                       | -55~+150 | °C   |

## Electrical Characteristics (Ta=25°C unless otherwise noted)

| Symbol         | Parameter                       | Test conditions       | Min | Typ | Max  | Unit |
|----------------|---------------------------------|-----------------------|-----|-----|------|------|
| I <sub>R</sub> | Reverse voltage leakage current | V <sub>R</sub> =10V   |     |     | 1    | μA   |
| V <sub>F</sub> | Forward voltage                 | I <sub>F</sub> =200mA |     |     | 0.60 | V    |

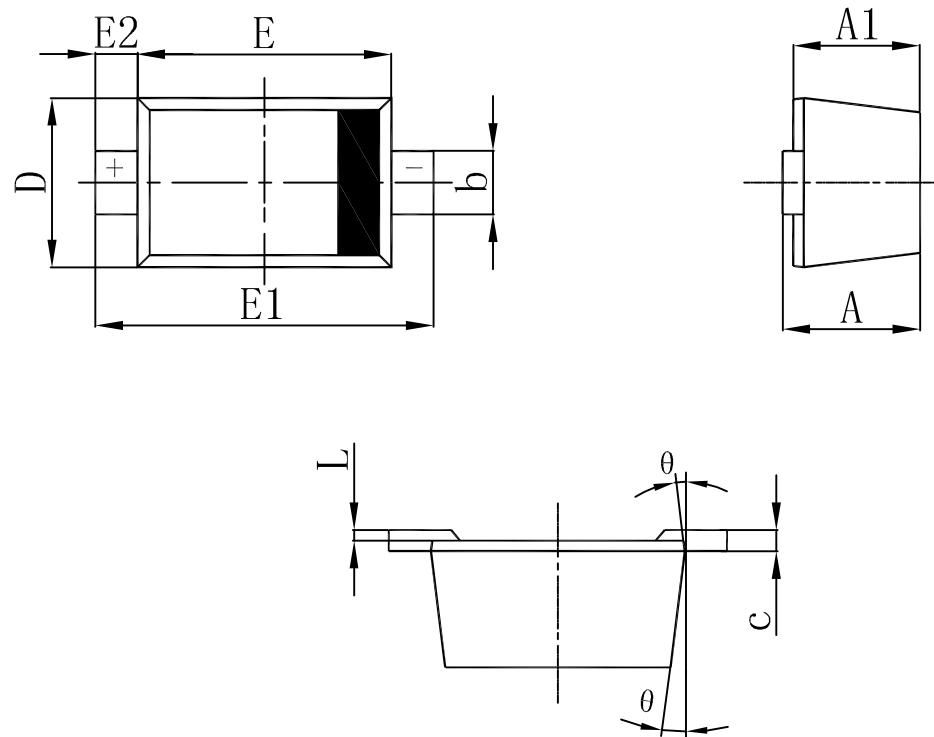


## Typical Characteristics





**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               |       |



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