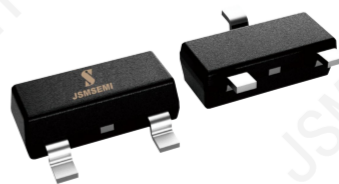
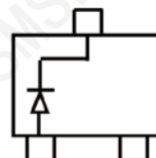


## Features

- ◆ Low turn-on voltage
- ◆ Fast switching
- ◆ Also available in lead free version



SOT23



Equivalent Circuit

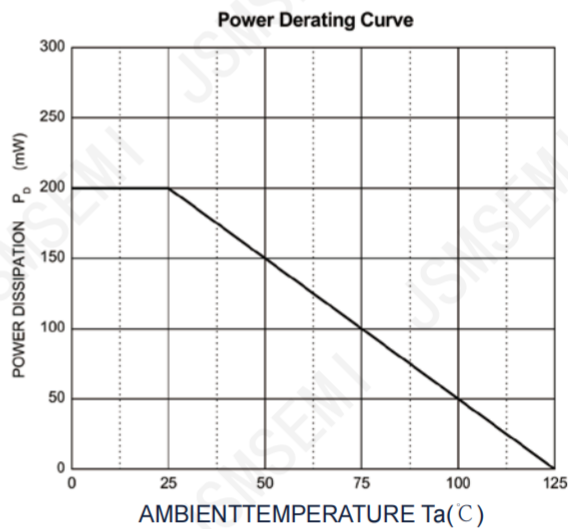
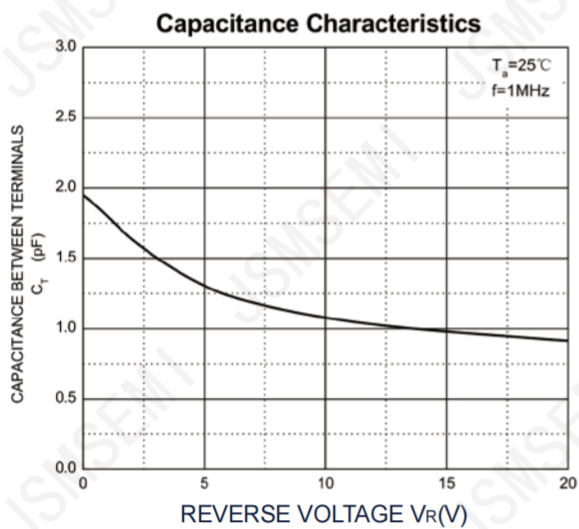
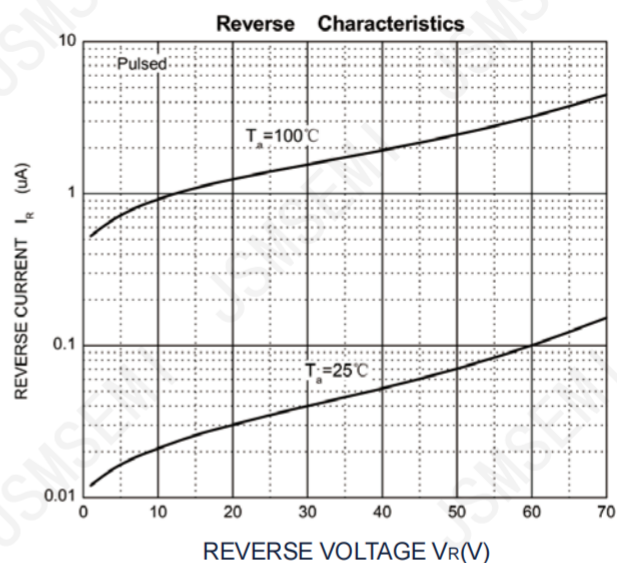
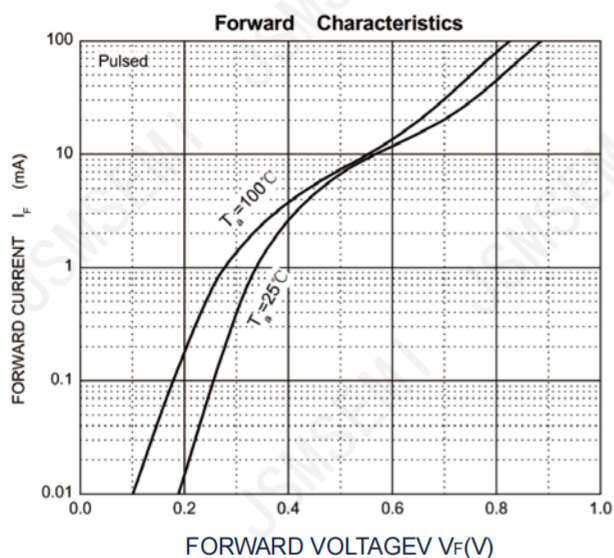
## Absolute Maximum Ratings(TA=25℃)

| Symbol          | Parameter                                       | Value    | Unit |
|-----------------|-------------------------------------------------|----------|------|
| $V_R$           | DC Blocking Voltage                             | 70       | V    |
| $I_F$           | Forward Continuous Current                      | 70       | mA   |
| $I_{FSM}$       | Non-repetitive Peak Forward Surge Current@8.3mS | 100      | mA   |
| $P_d$           | Power Dissipation                               | 200      | mW   |
| $R_{\theta JA}$ | Thermal Resistance From Junction To Ambient     | 500      | °C/W |
| $T_J$           | Operating Junction Temperature Range            | -40~+125 | °C   |
| $T_{stg}$       | Storage Temperature Range                       | -55~+150 | °C   |

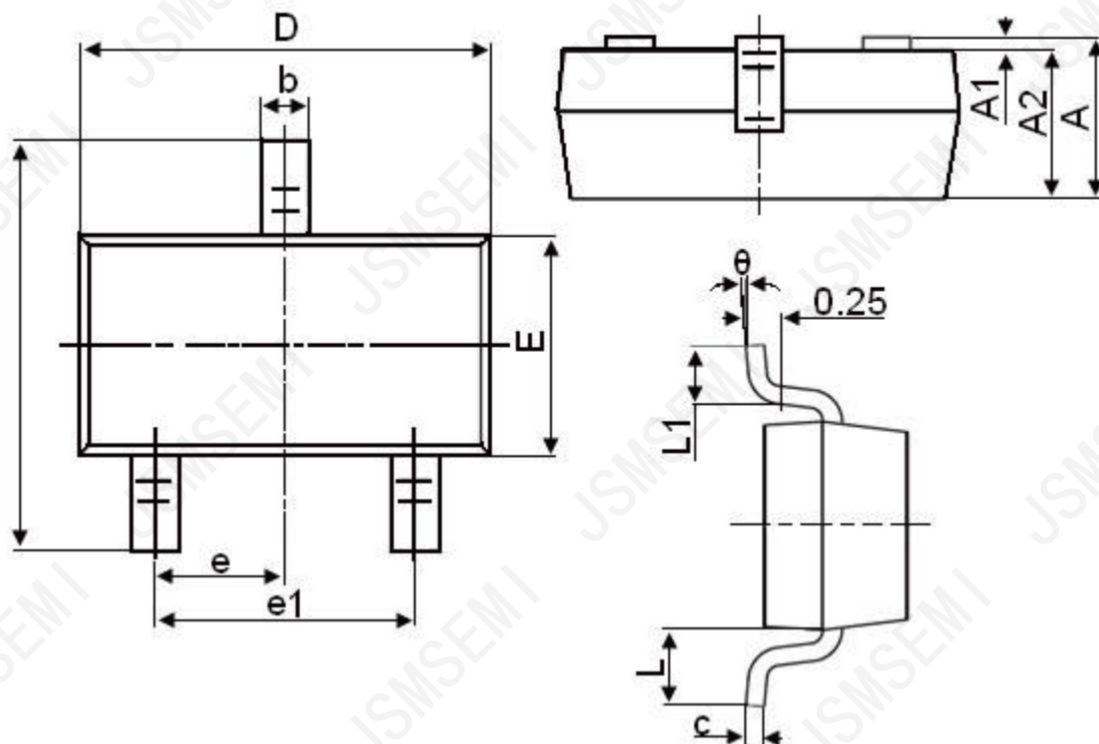
## Electrical Characteristics (TA=25℃ unless otherwise specified)

| Symbol     | Parameter                 | Test conditions                              | Min | Max  | Unit |
|------------|---------------------------|----------------------------------------------|-----|------|------|
| $V_{(BR)}$ | Reverse breakdown voltage | $I_R=10\mu A$                                | 70  |      | V    |
| $I_R$      | Reverse current           | $V_R=50V$                                    |     | 100  | nA   |
| $V_F$      | Forward voltage           | $I_F=1mA$                                    |     | 410  | mV   |
|            |                           | $I_F=15mA$                                   |     | 1000 | mV   |
| $C_D$      | Diode capacitance         | $V_R=0V, f=1MHz$                             |     | 2    | pF   |
| $t_{rr}$   | Reverse recovery time     | $I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100\Omega$ |     | 5    | nS   |

## Typical Characteristics



## Package Outline Dimensions



| Symbol | Dimensions in Millimeters |       |
|--------|---------------------------|-------|
|        | mm                        |       |
|        | Min                       | Max   |
| A      | 0.900                     | 1.150 |
| A1     | 0.000                     | 0.100 |
| A2     | 0.900                     | 1.050 |
| b      | 0.300                     | 0.500 |
| c      | 0.080                     | 0.150 |
| D      | 2.800                     | 3.000 |
| E      | 1.200                     | 1.400 |
| E1     | 2.250                     | 2.550 |
| e      | 0.950TYP                  |       |
| e1     | 1.800                     | 2.000 |
| L      | 0.550REF                  |       |
| L1     | 0.300                     | 0.500 |
| θ      | 0°                        | 8°    |

## Revision History

| Rev. | Change          | Date      |
|------|-----------------|-----------|
| V1.0 | Initial version | 2/23/2024 |
|      |                 |           |

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