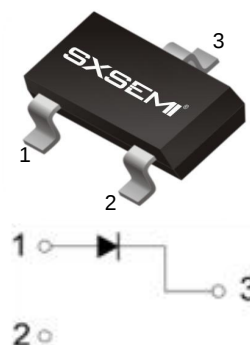


### FEATURES

- Low Leakage
- High Conductance

### SOT-23



MARKING: A11

### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

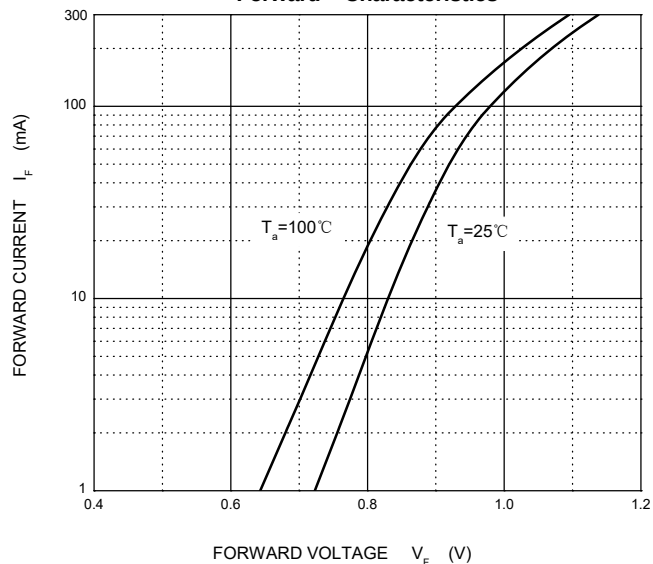
| Symbol          | Parameter                                                    | Value    | Unit                 |
|-----------------|--------------------------------------------------------------|----------|----------------------|
| $V_R$           | DC Blocking Voltage                                          | 200      | V                    |
| $I_O$           | Continuous Forward Current                                   | 200      | mA                   |
| $I_{FM}$        | Peak Forward Current                                         | 700      | mA                   |
| $I_{FSM}$       | Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | 2.0      | A                    |
| $P_D$           | Power Dissipation                                            | 350      | mW                   |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient                  | 357      | $^{\circ}\text{C/W}$ |
| $T_J, T_{stg}$  | Operation Junction and Storage Temperature Range             | -55~+150 | $^{\circ}\text{C}$   |

### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

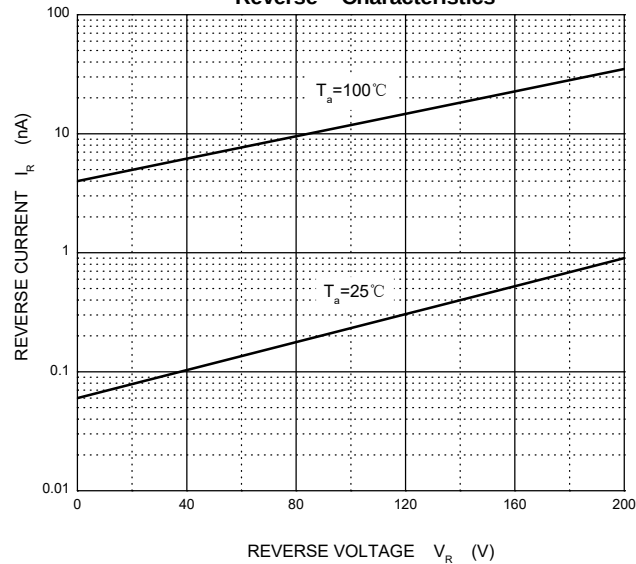
| Parameter         | Symbol     | Test conditions                | Min | Typ | Max  | Unit |
|-------------------|------------|--------------------------------|-----|-----|------|------|
| Reverse voltage   | $V_{(BR)}$ | $I_R=5\mu\text{A}$             | 200 |     |      | V    |
| Reverse current   | $I_R$      | $V_R=180\text{V}$              |     |     | 10   | nA   |
| Forward voltage   | $V_F$      | $I_F=1\text{mA}$               |     |     | 0.75 | V    |
|                   |            | $I_F=10\text{mA}$              |     |     | 0.85 |      |
|                   |            | $I_F=50\text{mA}$              |     |     | 0.95 |      |
|                   |            | $I_F=100\text{mA}$             |     |     | 1.1  |      |
|                   |            | $I_F=200\text{mA}$             |     |     | 1.3  |      |
|                   |            | $I_F=300\text{mA}$             |     |     | 1.5  |      |
| Total capacitance | $C_{tot}$  | $V_R=0\text{V}, f=1\text{MHz}$ |     |     | 4    | pF   |

## Typical Characteristics

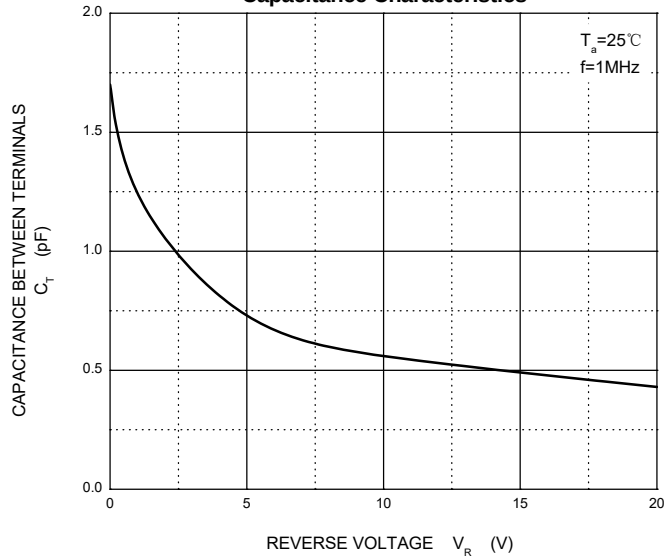
Forward Characteristics



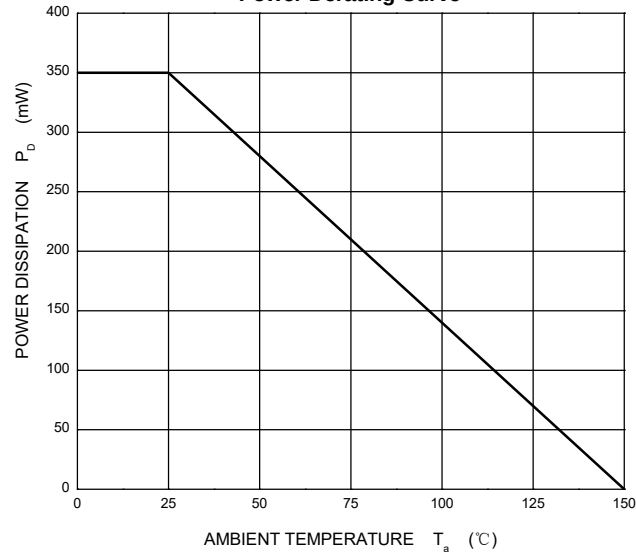
Reverse Characteristics



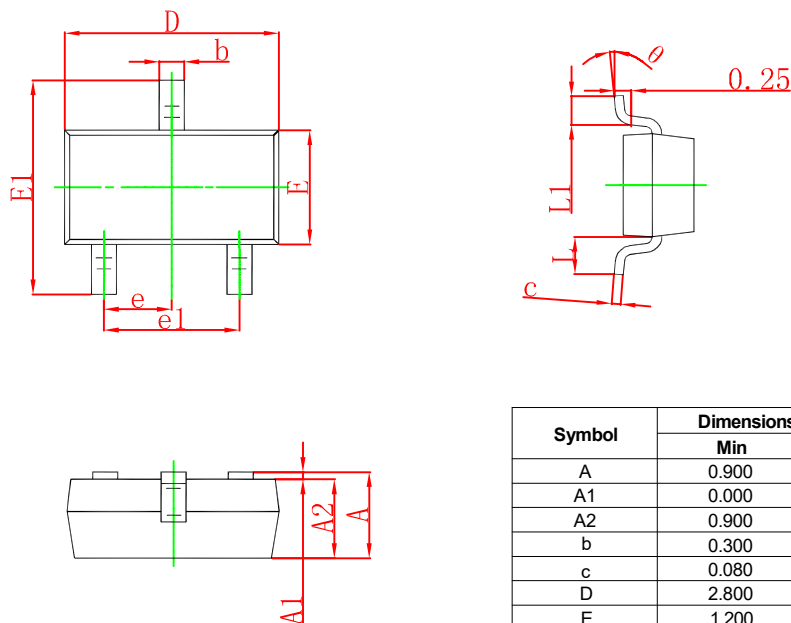
Capacitance Characteristics



Power Derating Curve

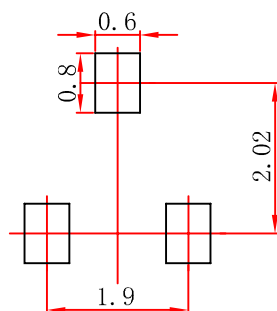


## SOT-23 package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.900                     | 1.150 | 0.035                | 0.045 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.050 | 0.035                | 0.041 |
| b      | 0.300                     | 0.500 | 0.012                | 0.020 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 2.800                     | 3.000 | 0.110                | 0.118 |
| E      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E1     | 2.250                     | 2.550 | 0.089                | 0.100 |
| e      | 0.950 TYP                 |       | 0.037 TYP            |       |
| e1     | 1.800                     | 2.000 | 0.071                | 0.079 |
| L      | 0.550 REF                 |       | 0.022 REF            |       |
| L1     | 0.300                     | 0.500 | 0.012                | 0.020 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |

## SOT-23 Suggested Pad Layout



### Note:

1. Controlling dimension; in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.