

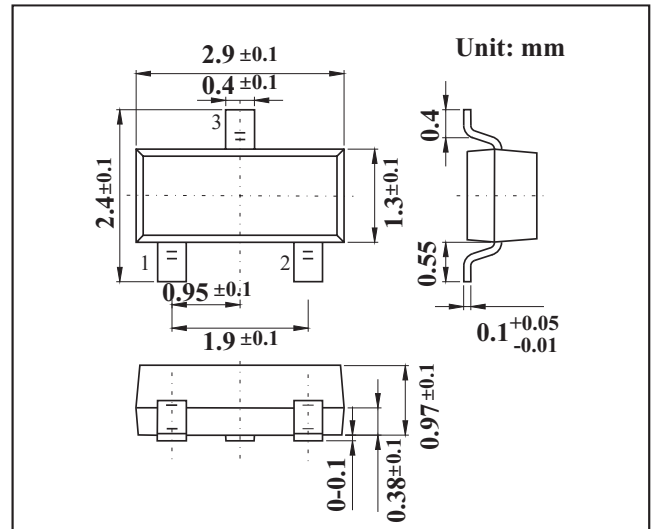
SOT-23 Small Signal Switching Diodes

FEATURES

- High Speed
- High Reliability
- Suitable for High Packing Density Layout

MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

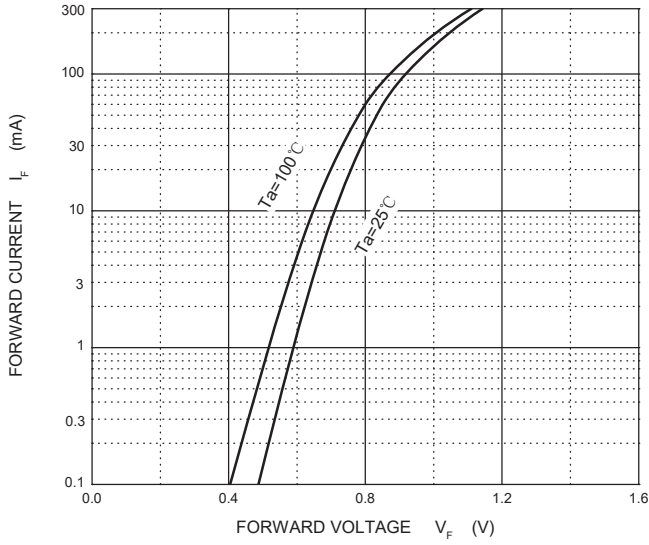
| Parameter | Symbol | Limit | Unit |
|---|-----------------|----------|------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 100 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Average Rectified Output Current | I_O | 300 | mA |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | I_{FSM} | 2 | A |
| Power Dissipation | P_D | 350 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 357 | °C/W |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{STG} | -55~+150 | °C |

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

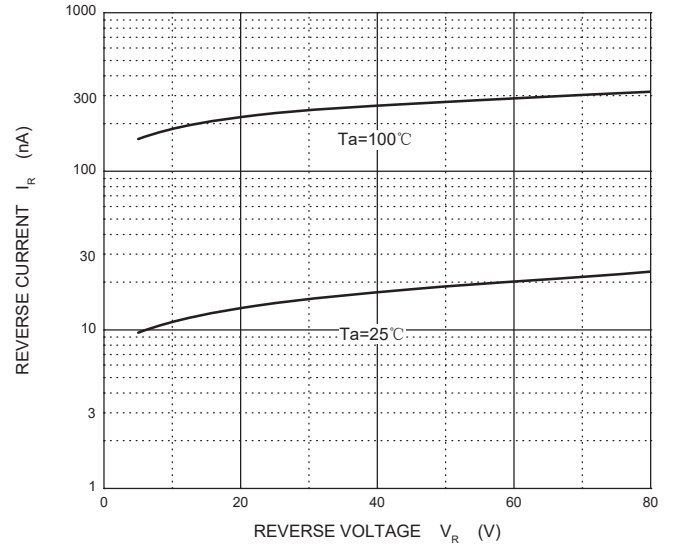
| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|---------------------------|------------|-----|-----|------|---------------|---|
| Reverse Breakdown Voltage | $V_{(BR)}$ | 100 | | | V | $I_R=100\mu\text{A}$ |
| Forward Voltage | V_{F1} | | | 715 | mV | $I_F=1\text{mA}$ |
| | V_{F2} | | | 855 | mV | $I_F=10\text{mA}$ |
| | V_{F3} | | | 1000 | mV | $I_F=50\text{mA}$ |
| | V_{F4} | | | 1250 | mV | $I_F=150\text{mA}$ |
| Reverse Current | I_{R1} | | | 1 | μA | $V_R=75\text{V}$ |
| | I_{R2} | | | 25 | nA | $V_R=20\text{V}$ |
| Diode Capacitance | C_D | | | 2 | pF | $V_R=0, f=1\text{MHz}$ |
| Reverse Recovery Time | t_{rr} | | | 4 | ns | $I_F=I_R=10\text{mA}$, $I_{rr}=0.1*I_R$ |

RATINGS AND CHARACTERISTIC CURVES

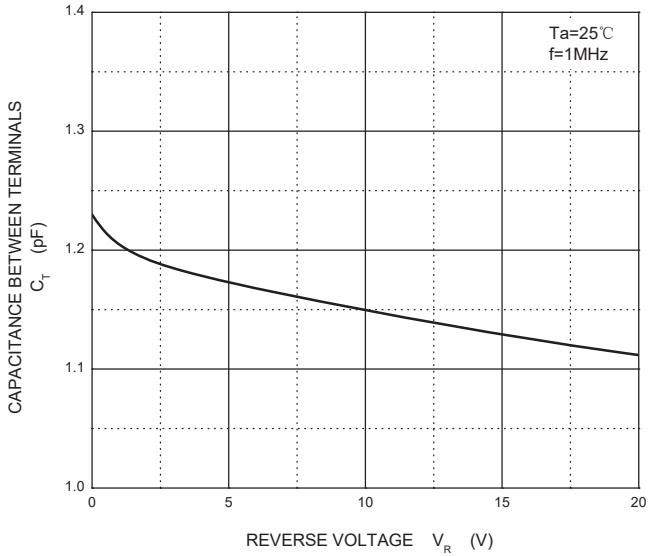
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

