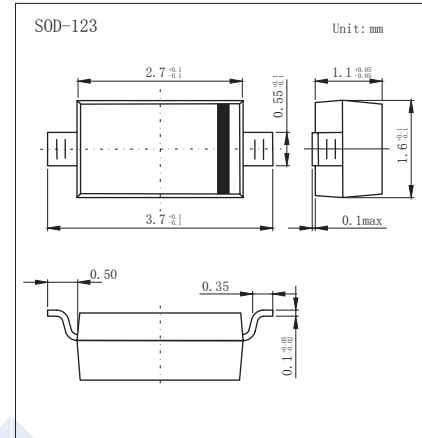


Switching Diodes

1N4448W

■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|--|-----------------|------------|---------------------------|
| Reverse Voltage | V_{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 75 | |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 53 | mA |
| Average Rectified Output Current | I_o | 250 | |
| Forward Continuous Current | I_{FM} | 500 | A |
| Peak Forward Surge Current @ $t=1\mu\text{s}$ @ $t=1\text{s}$ | I_{FSM} | 4 1.5 | |
| Power Dissipation | P_d | 500 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 250 | $^\circ\text{C}/\text{W}$ |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature range | T_{stg} | -55 to 150 | |

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------------|----------|---|------|-----|-------|---------------|
| Reverse breakdown voltage | V_R | $I_R = 100\mu\text{A}$ | 75 | | | V |
| Forward voltage | V_{F1} | $I_F = 5\text{mA}$ | 0.62 | | 0.72 | |
| | V_{F2} | $I_F = 10\text{mA}$ | | | 0.855 | |
| | V_{F3} | $I_F = 100\text{mA}$ | | | 1 | |
| | V_{F4} | $I_F = 150\text{mA}$ | | | 1.25 | |
| Reverse voltage leakage current | I_{R1} | $V_R = 75\text{V}$ | | | 2.5 | μA |
| | I_{R2} | $V_R = 20\text{V}$ | | | 25 | nA |
| Junction capacitance | C_j | $V_R = 0\text{V}, f = 1\text{MHz}$ | | | 4 | pF |
| Reverse recovery time | t_{rr} | $I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$ | | | 4 | ns |

■ Marking

| | |
|---------|----|
| Marking | T5 |
|---------|----|

Switching Diodes

1N4448W

■ Typical Characteristics

