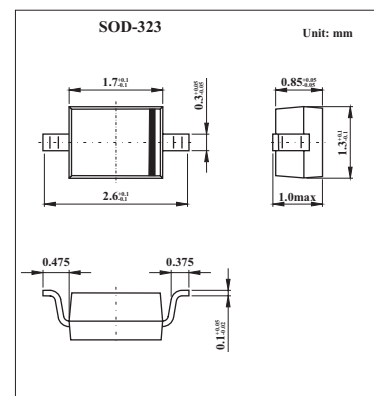


Surface Mount Fast Switching Diodes

1N4448WS

■ Features

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance

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

| Parameter | Symbol | Rating | Unit |
|---|-----------------|-------------|---------------------------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 100 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | | |
| Working Peak Reverse Voltage | V_{RWM} | 75 | V |
| DC Blocking Voltage | V_R | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 53 | V |
| Forward Continuous Current | I_{FM} | 500 | mA |
| Average Rectified Output Current | I_O | 250 | mA |
| Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \mu\text{s}$ | I_{FSM} | 4.0 | A |
| @ $t = 1.0\text{s}$ | | 2.0 | |
| Power Dissipation | P_D | 200 | mW |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 625 | $^\circ\text{C}/\text{W}$ |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +150 | $^\circ\text{C}$ |

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■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|-------------------------------|-----------------|---|------|-----|-------|------|
| Reverse Breakdown Voltage (*) | V(BR)R | I _R = 2.5 μ A | 75 | | | V |
| Forward Voltage (*) | V _F | I _F = 5.0mA | 0.62 | | 0.72 | V |
| | | I _F = 10mA | | | 0.855 | |
| | | I _F = 100mA | | | 1.0 | |
| | | I _F = 150mA | | | 1.25 | |
| Leakage Current (*) | I _R | V _R = 75V | | | 2.5 | μ A |
| | | V _R = 75V, T _j = 150°C | | | 50 | |
| | | V _R = 25V, T _j = 150°C | | | 30 | |
| | | V _R = 20V | | | 25 | nA |
| Total Capacitance | C _T | V _R = 0, f = 1.0MHz | | | 4.0 | pF |
| Reverse Recovery Time | t _{rr} | I _F = I _R = 10mA, I _{rr} = 0.1 x I _R , R _L = 100 Ω | | | 4.0 | ns |

* Short duration test pulse used to minimize self-heating effect.

■ Marking

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