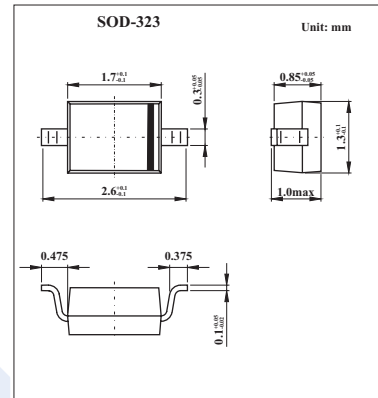


General Purpose Rectifier Applications

1N4001WS

■ Features

- Average forward current: $I_F(AV)=150\text{mA}$
- Repetitive peak reverse voltage : $V_{RRM}=50\text{V}$

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

| Characteristic | Symbol | Rating | UNIT |
|--|-----------------|-------------|------------------|
| Peak repetitive reverse voltage | V_{RRM} | 50 | V |
| Working peak reverse voltage | V_{RWM} | | |
| DC blocking voltage | V_R | | |
| RMS reverse voltage | $V_{R(RMS)}$ | 35 | V |
| Maximum average forward rectified current @ terminal temp @ $T_T = 75^\circ\text{C}$ | I_O | 150 | mA |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 300 | mA |
| Maximum forward voltage @ $I_F = 100\text{mA}$ | V_F | 1.1 | V |
| Maximum dc reverse current @ $T_A = 25^\circ\text{C}$ | I_R | 5.0 | μA |
| Rated DC blocking voltage @ $T_A = 100^\circ\text{C}$ | | 50 | |
| Typical thermal resistance, junction to ambient air | $R_{\theta JA}$ | 50 | K/W |
| Typical junction capacitance | C_j | 2 | pF |
| Operating and storage temperature range | T_j, T_{stg} | -55 to +150 | $^\circ\text{C}$ |

* Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

■ Marking

| | |
|---------|----|
| Marking | T4 |
|---------|----|

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■ Typical Characteristics

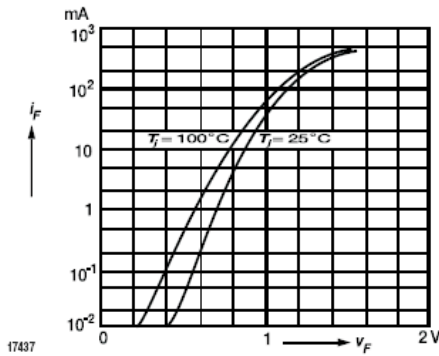


Figure 1. Forward characteristics

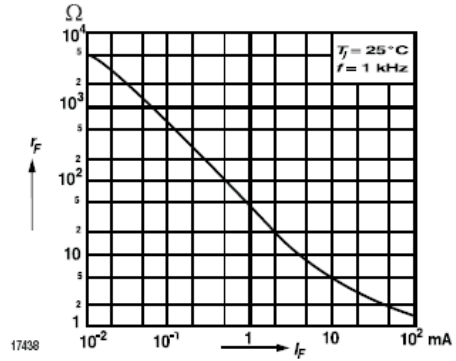


Figure 2. Dynamic Forward Resistance vs. Forward Current

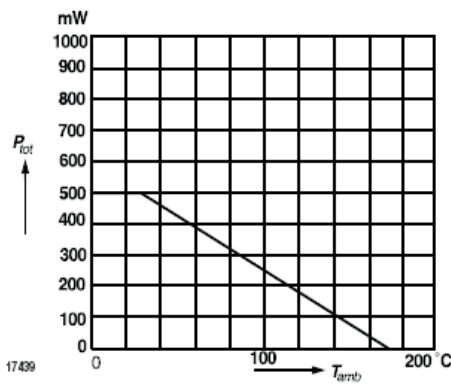


Figure 3. Admissible Power Dissipation vs. Ambient Temperature

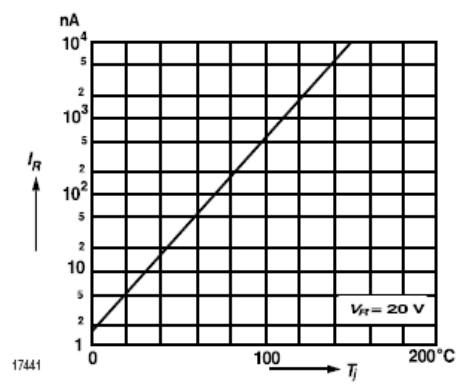


Figure 5. Leakage Current vs. Junction Temperature

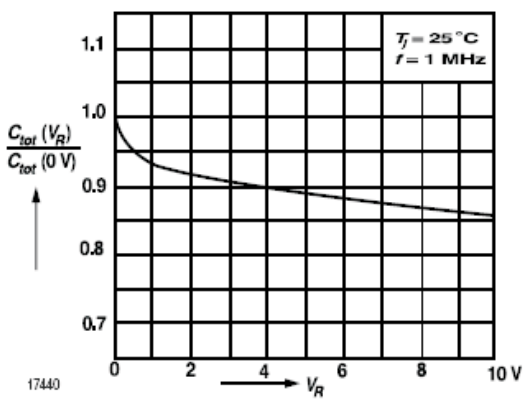


Figure 4. Reverse Capacitance vs. Reverse Voltage