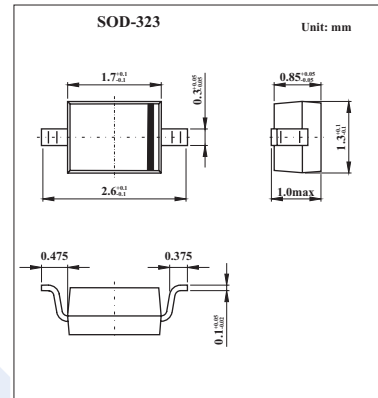


General Purpose Rectifier Applications

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

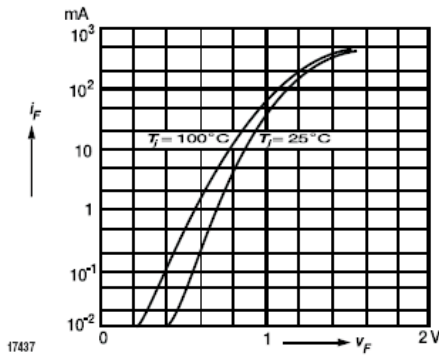


Figure 1. Forward characteristics

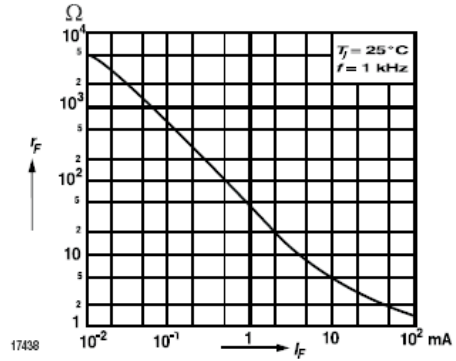


Figure 2. Dynamic Forward Resistance vs. Forward Current

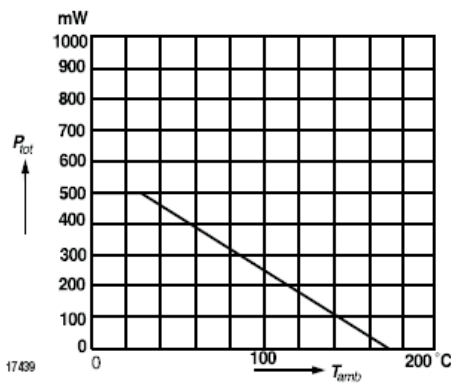


Figure 3. Admissible Power Dissipation vs. Ambient Temperature

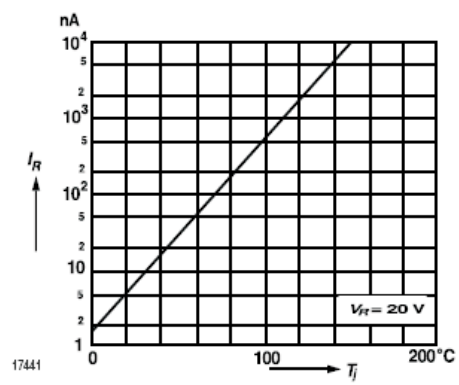


Figure 5. Leakage Current vs. Junction Temperature

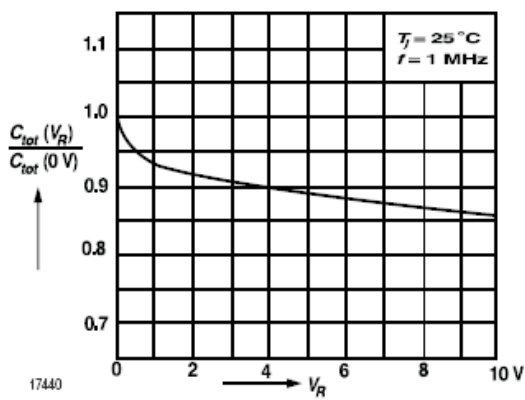


Figure 4. Reverse Capacitance vs. Reverse Voltage