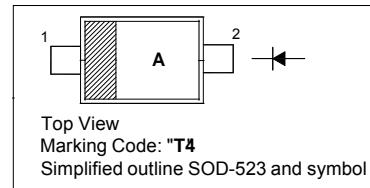


SOD-523 封装二极管/SOD-523 Plastic-Encapsulate Diodes**1N4148WT****Silicon Epitaxial Planar Switching Diode****PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode

**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	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_{F(AV)}$	125	mA
Forward Continuous Current	$I_{FM}$	250	mA
Non-repetitive Peak Forward Surge Current at $t = 1 \mu\text{s}$ at $t = 100 \text{ ms}$	$I_{FSM}$	2 1	A
Power Dissipation	$P_{tot}$	150	mW
Thermal Resistance Junction to Ambient Air	$R_{eJA}$	833	°C/W
Operating Temperature Range	$T_j$	- 65 to + 150	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	°C

**Characteristics at  $T_a = 25^\circ\text{C}$** 

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	$V_F$	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at $V_R = 75 \text{ V}$ at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 25 \text{ V}, T_j = 150^\circ\text{C}$	$I_R$	- - - -	1 25 50 30	µA nA µA µA
Total Capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	$C_T$	-	2	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R, I_F = I_R = 10 \text{ mA}, R_L = 100 \Omega$	$t_{rr}$	-	4	ns

## SOD-523 封装二极管/SOD-523 Plastic-Encapsulate Diodes

### 1N4148WT

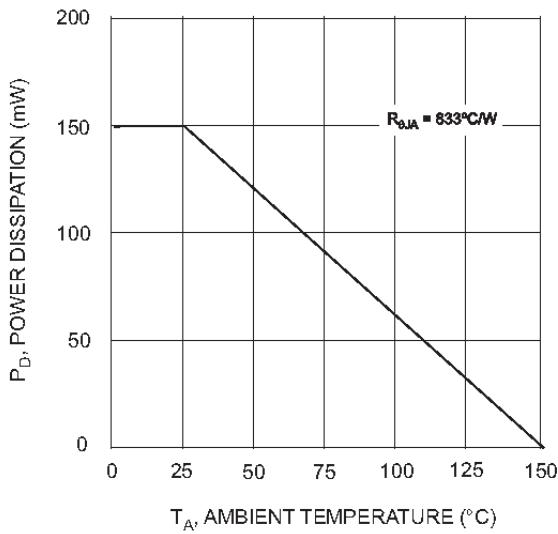


Fig. 1 Derating Curve

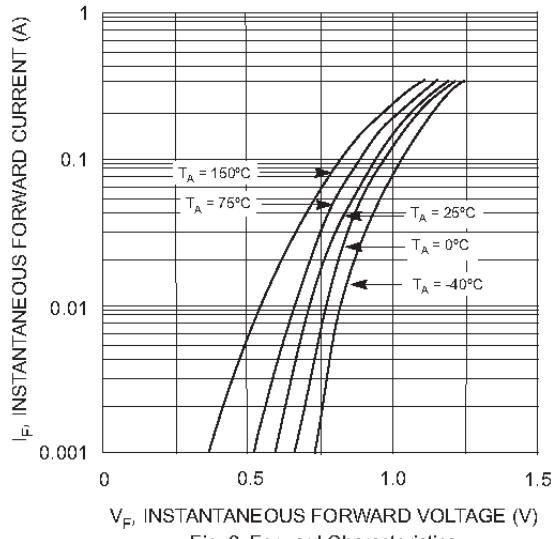


Fig. 2 Forward Characteristics

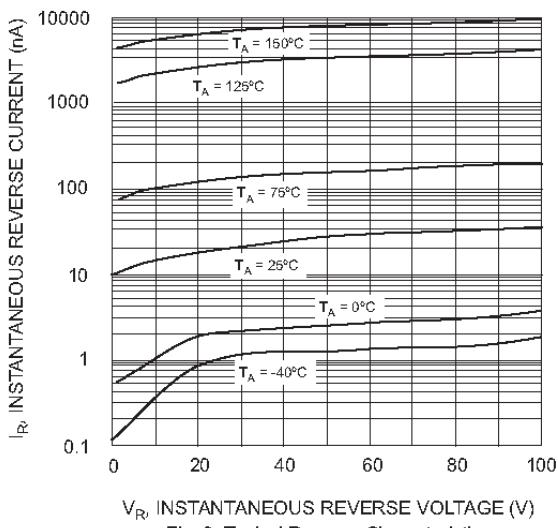


Fig. 3 Typical Reverse Characteristics

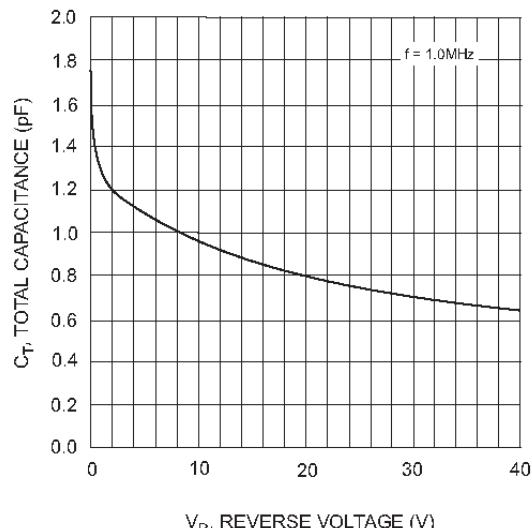


Fig. 4 Typical Capacitance vs. Reverse Voltage

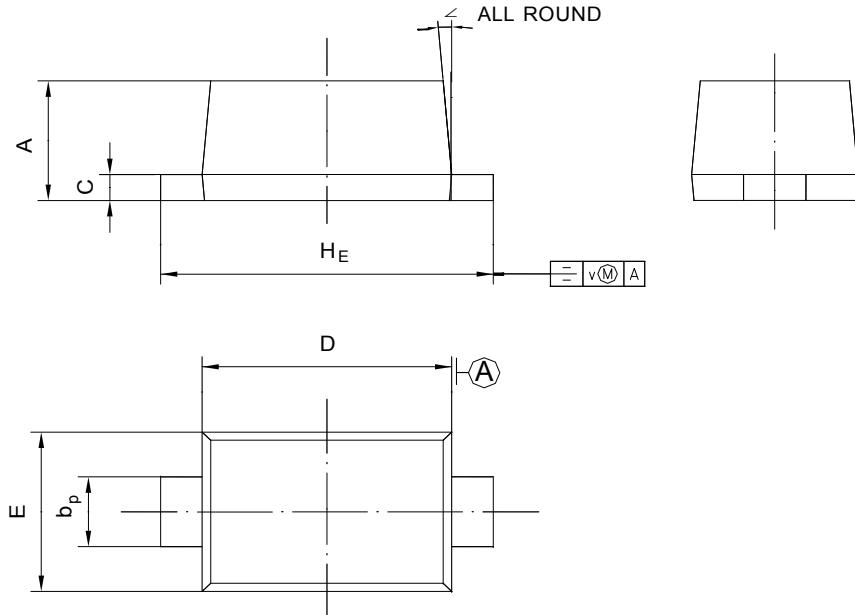
## SOD-523 封装二极管/SOD-523 Plastic-Encapsulate Diodes

**1N4148WT**

### PACKAGE OUTLINE

**SOD-523**

Plastic surface mounted package; 2 leads



UNIT	A	$b_p$	C	D	E	$H_E$	V	$\angle$
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°