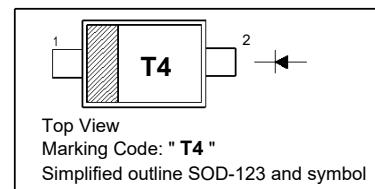


**Features**

- SOD-123 package
- Fast switching
- These diodes are also available in other case style including the DO-35 case with the type designation 1N4148, the MiniMELF case with the type designation LL4148 and the MicroMELF case with the type designation MCL4148.

**PINNING**

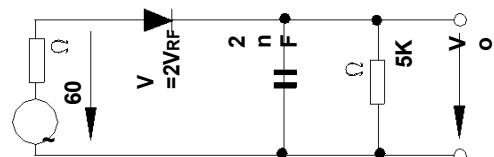
PIN	DESCRIPTION
1	Cathode
2	Anode

**Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )**

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Non-repetitive Peak Forward Surge Current at $t = 1 \text{ s}$ at $t = 1 \text{ ms}$ at $t = 1 \mu\text{s}$	$I_{FSM}$	0.5 1 4	A
Power Dissipation	$P_{tot}$	400	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	312	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	°C

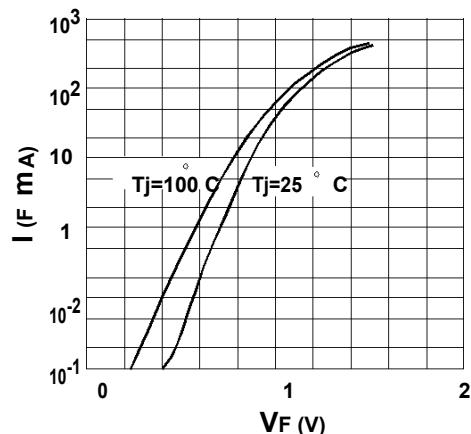
**Characteristics at  $T_a = 25^\circ\text{C}$** 

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

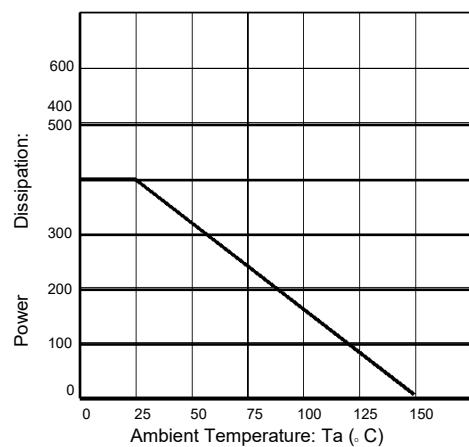


Rectification Efficiency Measurement Circuit

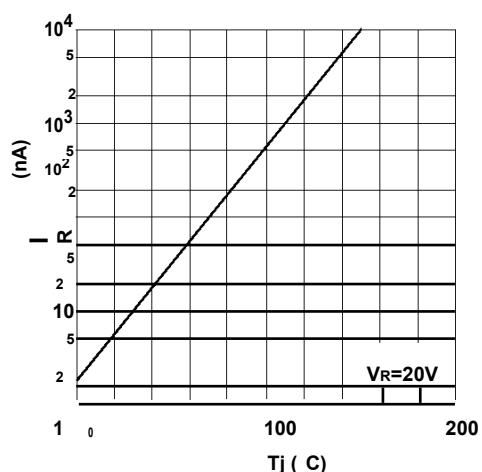
## Forward characteristics



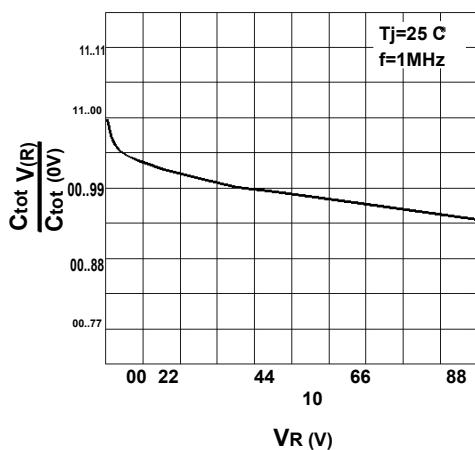
## Power Dissipation vs Ambient Temperature



## Leakage current vs. junction temperature



## Reverse capacitance vs.. reverse voltage





## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123

