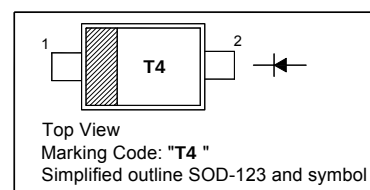


**Silicon Epitaxial Planar Switching Diode****Features**

- 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

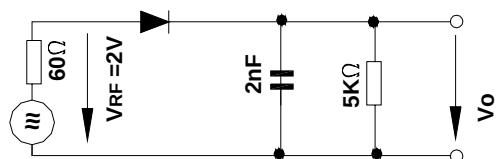
PIN	DESCRIPTION
1	Cathode
2	Anode

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

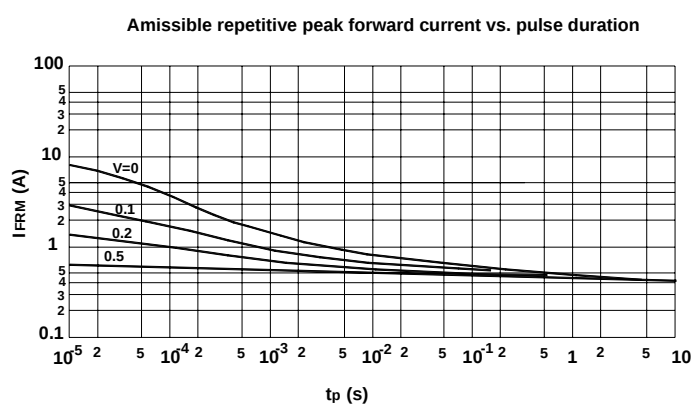
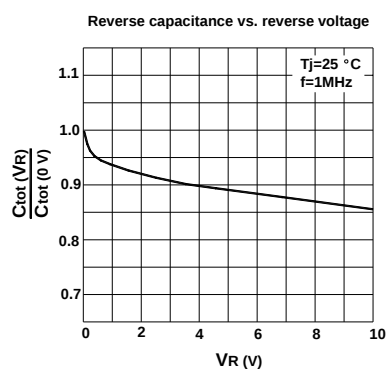
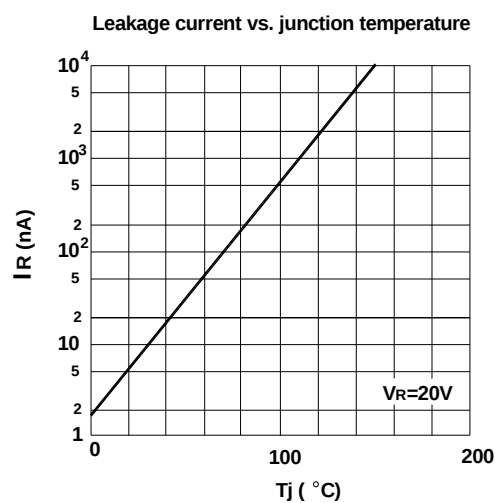
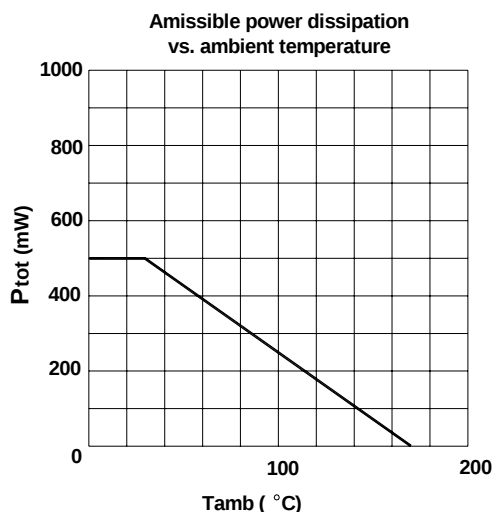
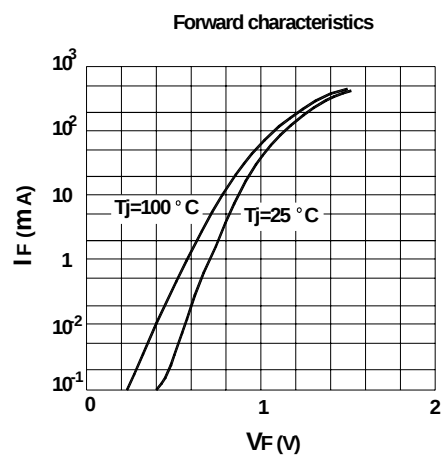
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Non-repetitive Peak Forward Surge Current at $t = 1\ \mu\text{s}$	I_{FSM}	2	A
Power Dissipation	P_{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	312	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\ \text{mA}$	V_F	1	V
Reverse Current at $V_R = 20\ \text{V}$ at $V_R = 75\ \text{V}$ at $V_R = 20\ \text{V}$, $T_J = 150^\circ\text{C}$	I_R	25 5 50	nA μA μA
Total Capacitance at $V_R = 0\ \text{V}$, $f = 1\ \text{MHz}$	C_{tot}	4	pF
Reverse Recovery Time at $I_F = 10\ \text{mA}$ to $I_R = 1\ \text{mA}$, $V_R = 6\ \text{V}$, $R_L = 100\ \Omega$	t_{rr}	4	ns



Rectification Efficiency Measurement Circuit

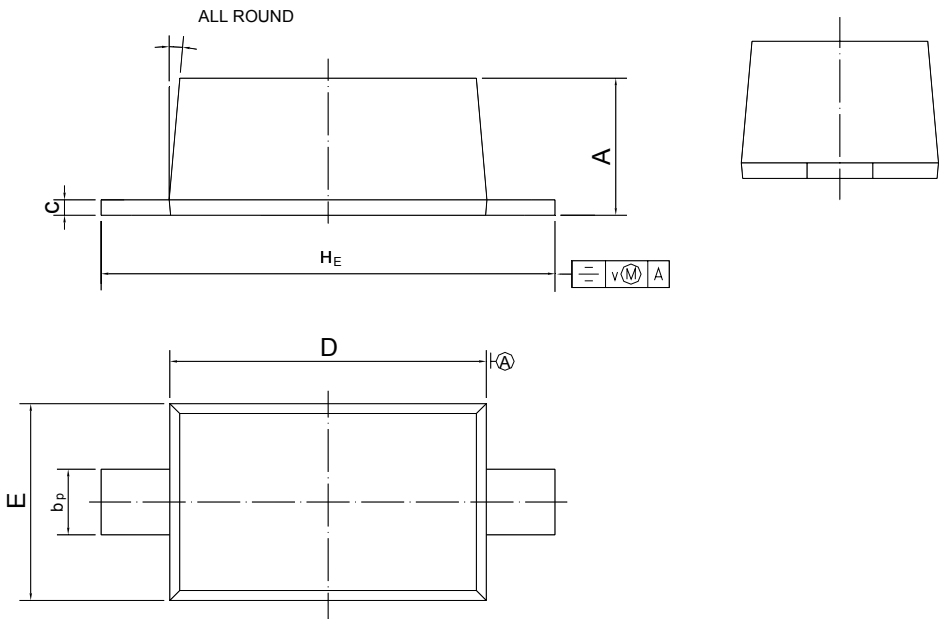




PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°