

# 1N4148W

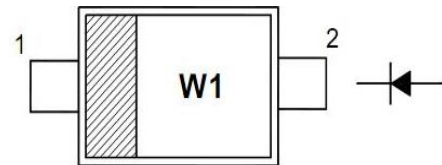
## Silicon Epitaxial Planar Switching Diode

### 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 Mini MELF case with the type designation LL4148 and the Micro MELF case with the type designation MCL4148.

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code: "W1"

Simplified outline SOD-123 and symbol

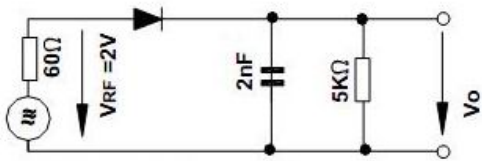
### Absolute Maximum Ratings (Ta = 25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Peak Reverse Voltage	V <sub>RM</sub>	100	V
Reverse Voltage	V <sub>R</sub>	75	V
Average Rectified Forward Current	I <sub>F (AV)</sub>	150	mA
Non-repetitive Peak Forward Surge Current at t = 1 μs	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>tot</sub>	400	mW
Thermal Resistance from Junction to Ambient Air	R <sub>θJA</sub>	312	°C/W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to + 150	°C

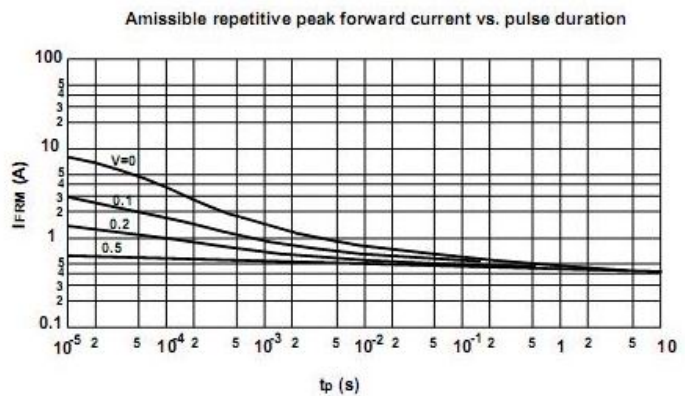
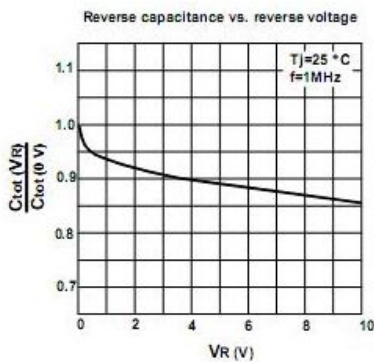
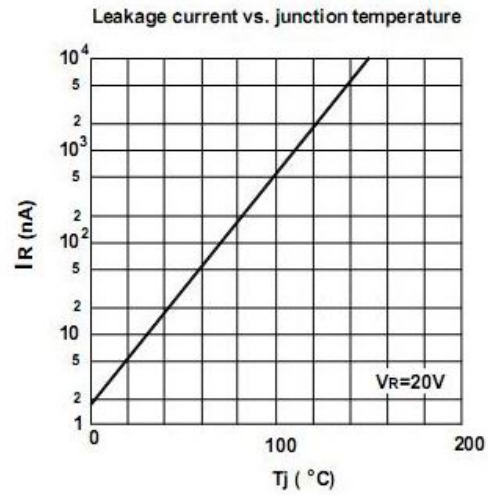
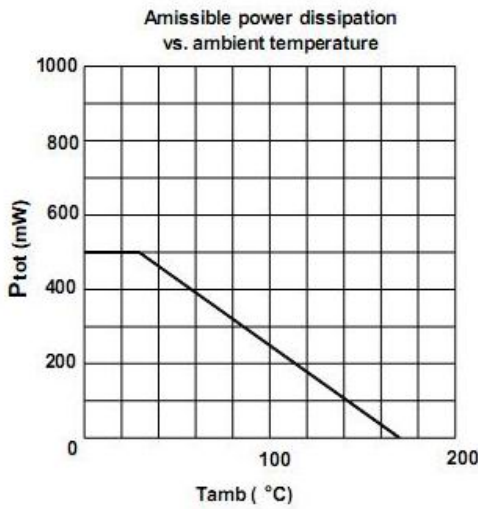
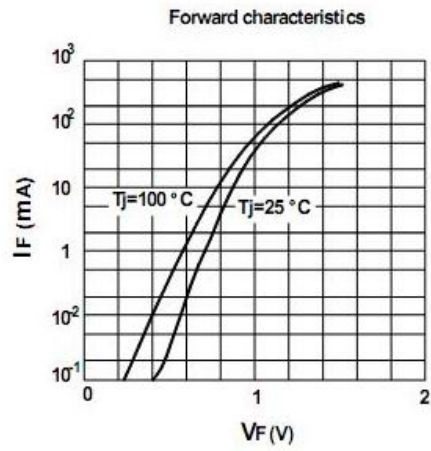
### Electrical Characteristics (Ta = 25°C)

PARAMETER	SYMBOL	MAX.	UNIT
Forward Voltage at I <sub>F</sub> = 10 mA	V <sub>F</sub>	1	V
Reverse Current	I <sub>R</sub>	25	nA
at V <sub>R</sub> = 20 V		5	μA
at V <sub>R</sub> = 75 V		50	μA
at V <sub>R</sub> = 20 V, T <sub>J</sub> = 150°C			
Total Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>tot</sub>	4	pF
Reverse Recovery Time at I <sub>F</sub> = 10 mA to I <sub>R</sub> = 1 mA, V <sub>R</sub> = 6 V, R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	4	ns

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Rectification Efficiency Measurement Circuit

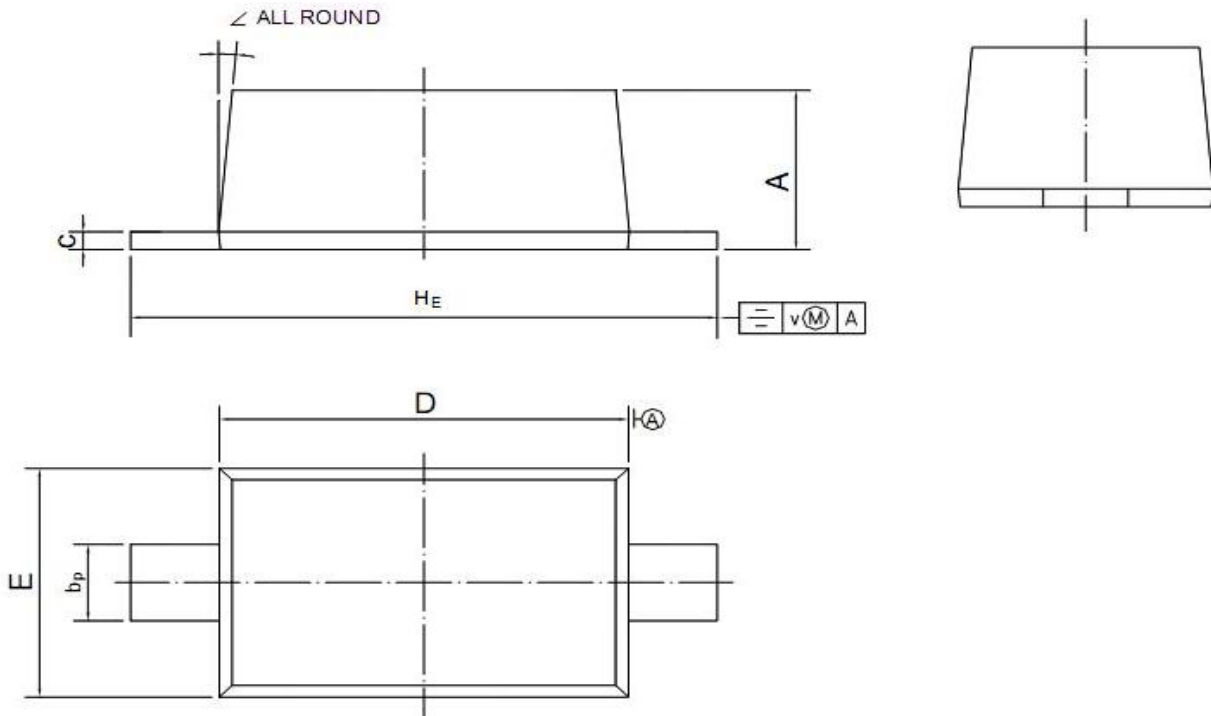


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## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b <sub>p</sub>	c	D	E	H <sub>E</sub>	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°

Note: Specifications are subject to change without notice.