

**1N4148WS****Silicon Epitaxial Planar Switching Diode****FEATURES**

SOD-323 package

Fast switching

These diodes are also available in other case

style including the DO-35 case with the type

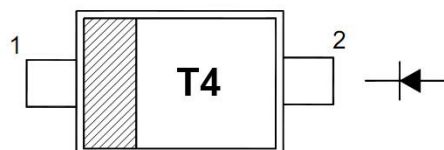
designation 1N4148, the Mini MELF case with the

type designation LL4148 and the Micro MELF case

with the type designation MCL4148.

**PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code: "T4"

Simplified outline SOD-323 and symbol

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS****Absolute Maximum Ratings (Ta = 25°C)**

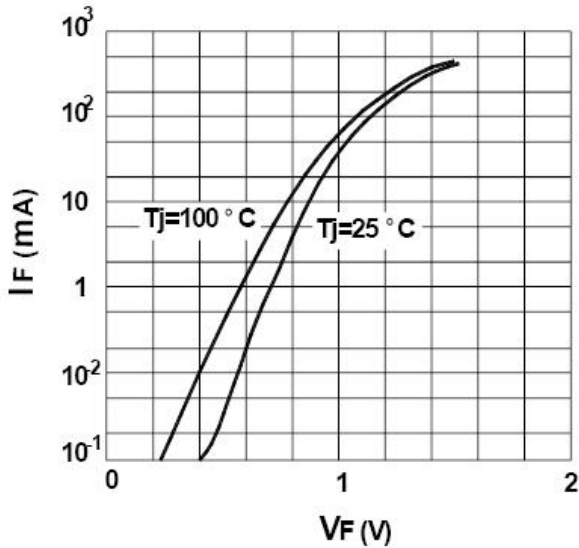
PARAMETER	SYMBOL	VALUE	UNIT
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_F (AV)$	150	mA
Surge Forward Current ( $t < 1$ s, $T_j = 25$ °C)	$I_{FSM}$	350	mA
Power Dissipation	$P_{tot}$	200	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	°C

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

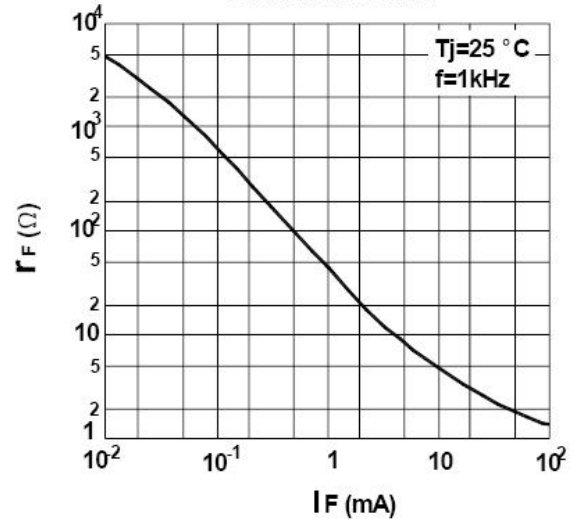
PARAMETER	SYMBOL	VALUE	UNIT
Forward Voltage at $I_F = 10$ mA	$V_F$	1	V
Reverse Current	$I_R$	25	nA
at $V_R = 20$ V		5	$\mu$ A
at $V_R = 75$ V		50	$\mu$ A
at $V_R = 20$ V, $T_j = 150$ °C			
Total Capacitance at $V_R = 0$ V, $f = 1$ MHz	$C_{tot}$	4	pF
Reverse Recovery Time at $I_F = 10$ mA to $I_R = 1$ mA, $V_R = 6$ V, $R_L = 100$ $\Omega$	$t_{rr}$	4	ns

RATINGS AND CHARACTERISTIC CURVES 1N4148WS

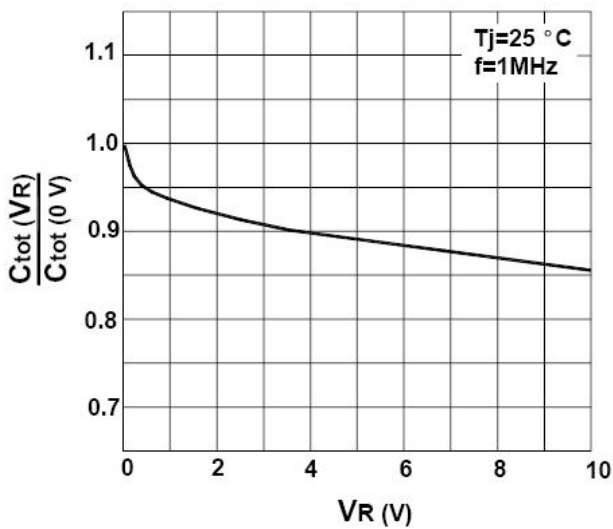
Forward characteristics



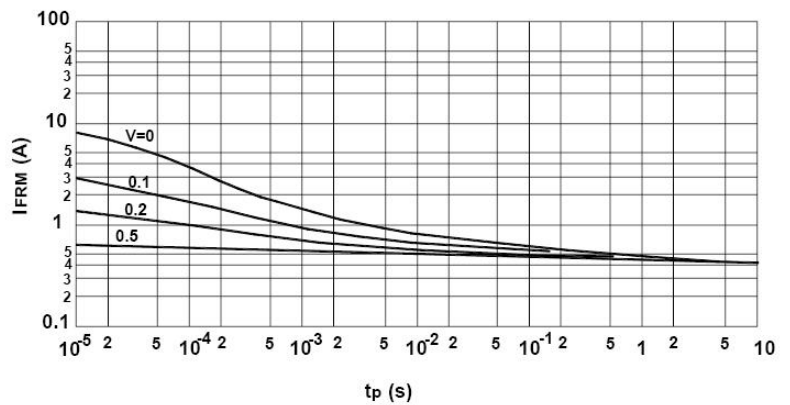
Dynamic forward resistance vs. forward current



Reverse capacitance vs. reverse voltage



Admissible repetitive peak forward current vs. pulse duration



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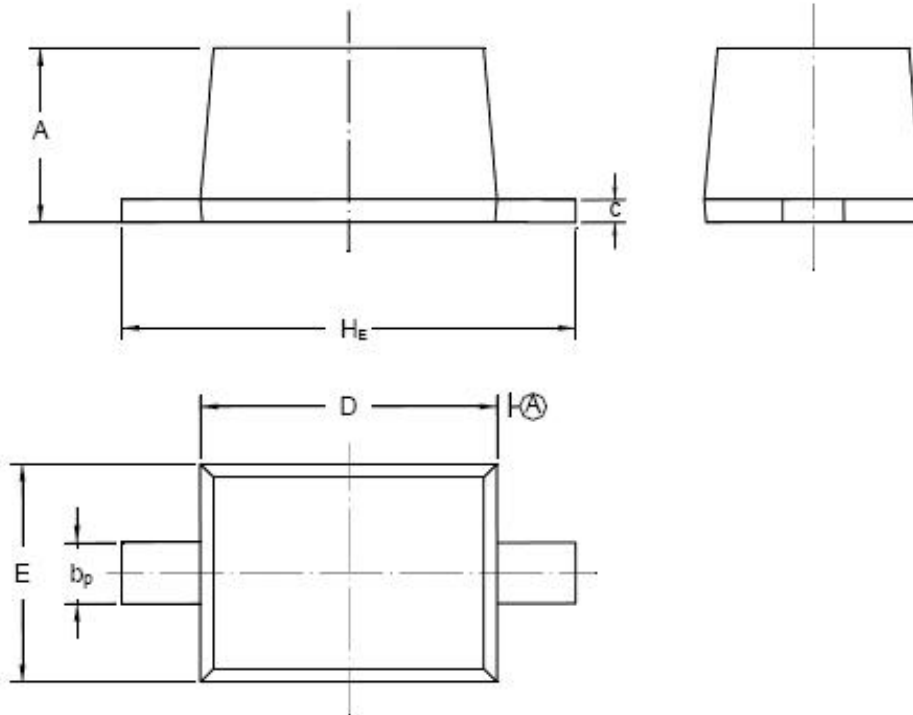
**RATINGS AND CHARACTERISTIC CURVES 1N4148WS**


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**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30