

## 1N4148WS

## Silicon Epitaxial Planar Switching Diode

## FEATURES

SC-76 package

Fast switching

These diodes are also available in other case

style including the DO-35 case with the type

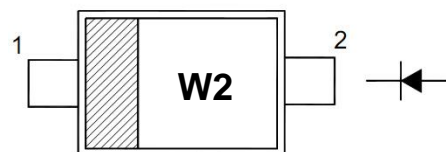
designation 1N4148, the Mini MELF case with the

type designation LL4148 and the Micro MELF case

with the type designation MCL4148.

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code: "W2"

Simplified outline SC-76 and symbol

## MAXIMUM RATINGS AND CHARACTERISTICS

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

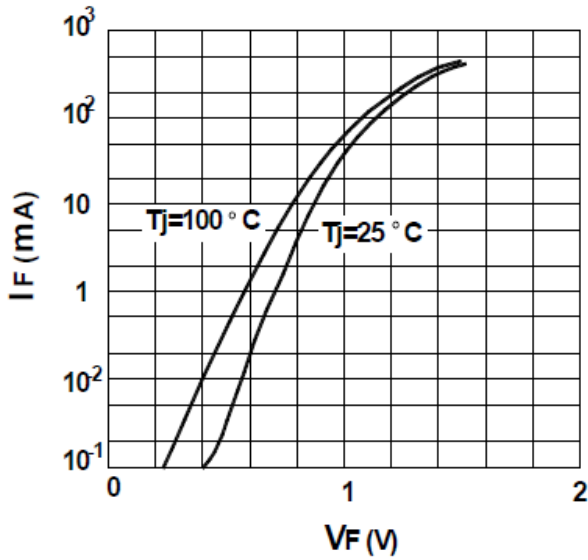
PARAMETER	SYMBOL	VALUE	UNIT
Peak Reverse Voltage	V <sub>RM</sub>	100	V
Reverse Voltage	V <sub>R</sub>	75	V
Average Rectified Forward Current	I <sub>F(AV)</sub>	150	mA
Surge Forward Current	I <sub>FSM</sub>	2 1	A
			at t < 1 μs at t < 1 s
Power Dissipation	P <sub>tot</sub>	200	mW
Thermal Resistance from Junction to Ambient Air	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to + 150	°C

## Characteristics at Ta = 25°C

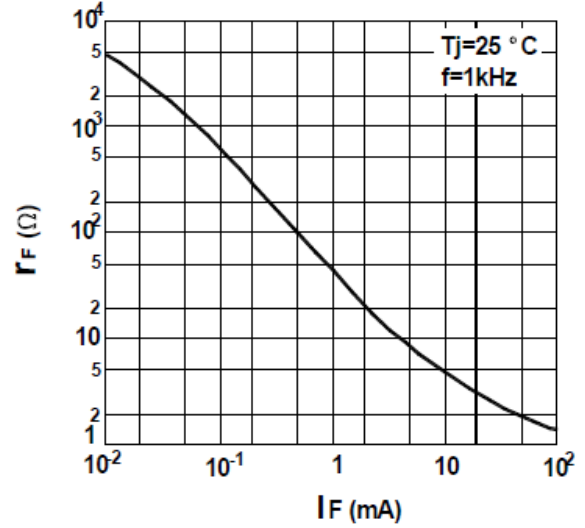
PARAMETER	SYMBOL	Min.	Max.	UNIT
Reverse Breakdown Voltage at I <sub>R</sub> = 1 μA	V <sub>(BR)R</sub>	75	-	V
Forward Voltage	V <sub>F</sub>	-	0.715	V
at I <sub>F</sub> = 1 mA		-	0.855	
at I <sub>F</sub> = 10 mA		-	1	
at I <sub>F</sub> = 50 mA		-	1.25	
at I <sub>F</sub> = 150 mA		-		
Peak Reverse Current	I <sub>R</sub>	-	1	μA
at V <sub>R</sub> = 75 V		-	25	nA
at V <sub>R</sub> = 20 V		-	50	μA
at V <sub>R</sub> = 75 V, T <sub>J</sub> = 150°C		-	30	μA
at V <sub>R</sub> = 25 V, T <sub>J</sub> = 150°C		-		
Total Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>T</sub>	-	2	pF
Reverse Recovery Time at I <sub>TR</sub> = 0.1X I <sub>R</sub> , I <sub>F</sub> = I <sub>R</sub> = 10 mA, R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	-	4	ns

RATINGS AND CHARACTERISTIC CURVES 1N4148WS

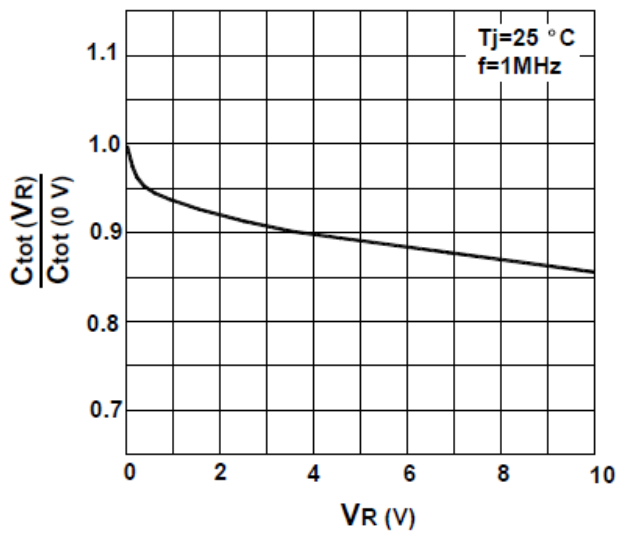
Forward characteristics



Dynamic forward resistance vs. forward current



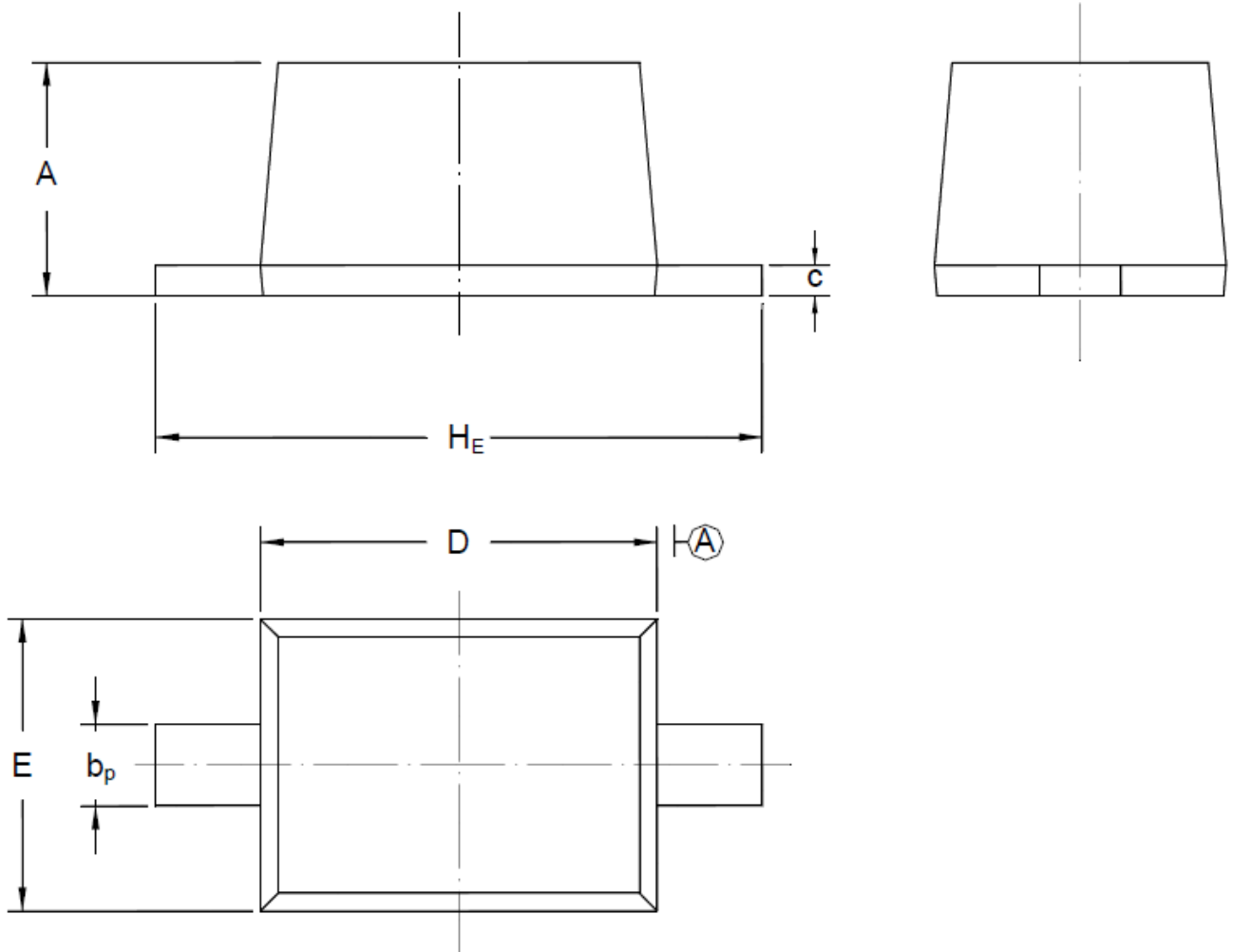
Reverse capacitance vs. reverse voltage



RATINGS AND CHARACTERISTIC CURVES 1N4148WS

SC-76 PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



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

Note: Specification are subject to change without notice. For more detail and update, please visit our website.