

1N4148WS

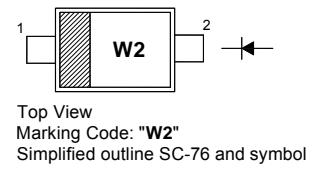
Silicon Epitaxial Planar Switching Diode

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 MiniMELF case with the type designation LL4148 and the MicroMELF case with the type designation MCL4148.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

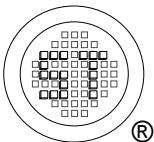


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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
Surge Forward Current at $t < 1 \mu\text{s}$ at $t < 1 \text{ s}$	I_{FSM}	2 1	A
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

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1 \mu\text{A}$	$V_{(BR)R}$	75	-	V
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

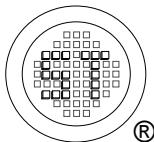
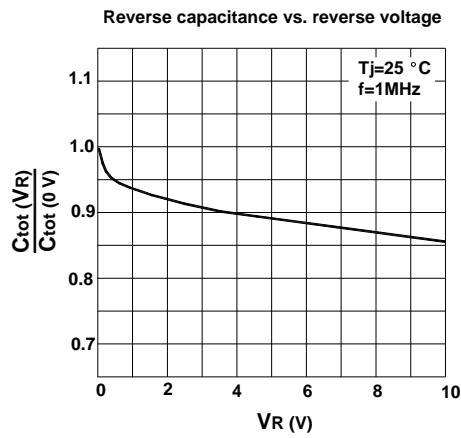
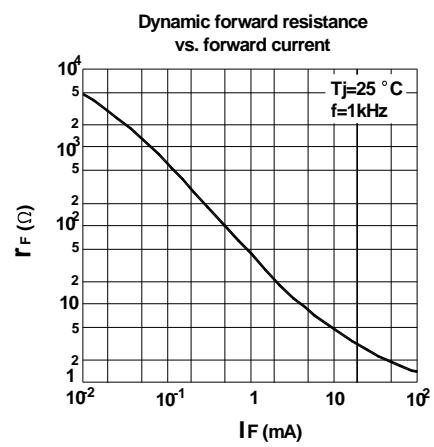
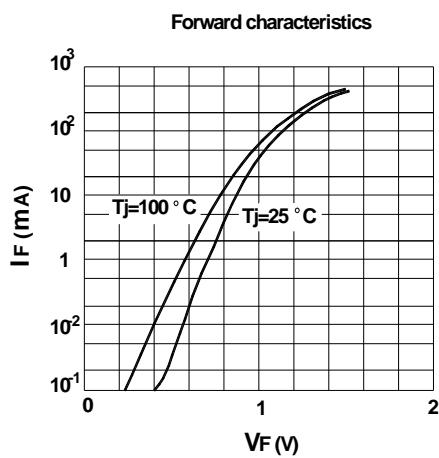


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ISO/TS 16949 : 2009 ISO 14001 : 2004 ISO 9001 : 2008 BS-OHSAS 18001 : 2007 IECQ QC 080000
Certificate No. 160719000 Certificate No. 7116 Certificate No. 50713410 Certificate No. 7116
Intertek UKAS Quality Management System
DEKRA Quality Management System
Intertek UKAS Quality Management System
SGS Quality Management System

Dated: 21/04/2016 Rev: 04



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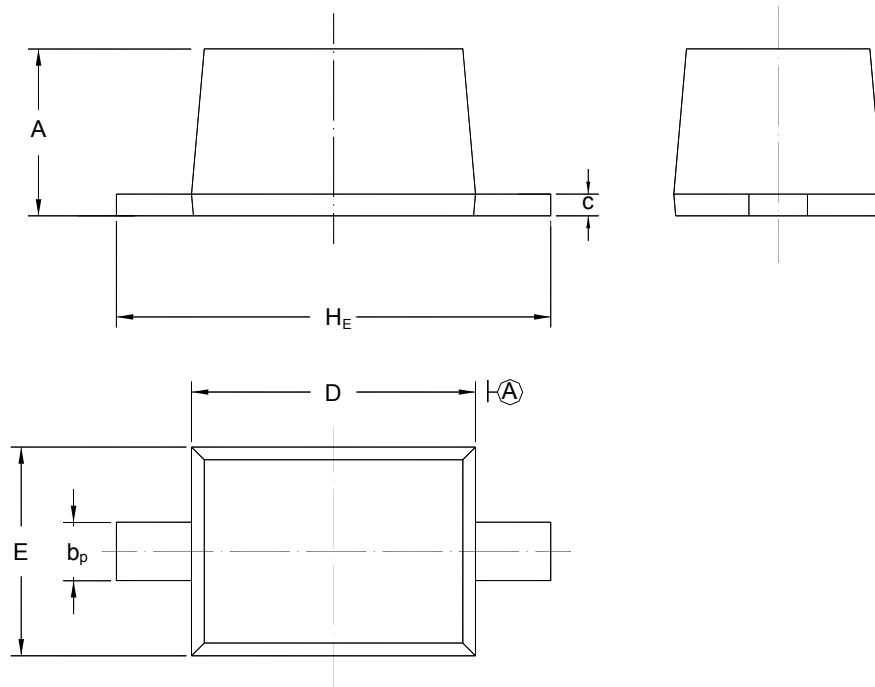
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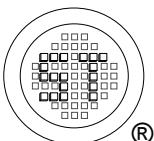
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SC-76



UNIT	A	b_p	C	D	E	H_E
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



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ISO14001



ISO 9001 : 2015



• 3007



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Certificate No. 160713060 Certificate No. 7116 Certificate No. 50713410 Certificate No. 7116 Certificate No. PRC-HSPM-1403-1**

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