



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

1N4148WS

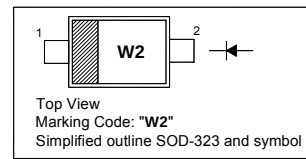
Silicon Epitaxial Planar Switching Diode

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

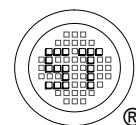


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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 ($t < 1$ s, $T_j = 25^\circ\text{C}$)	I_{FSM}	350	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
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 $I_F = 10$ mA	V_F	1	V
Reverse Current at $V_R = 20$ V at $V_R = 75$ V at $V_R = 20$ V, $T_j = 150^\circ\text{C}$	I_R	25 5 50	nA μA μA
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



Dated : 22/07/2010 Rev:01



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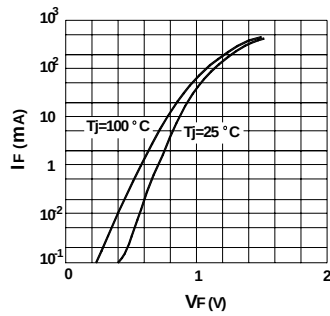
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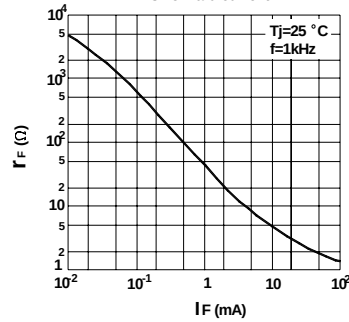
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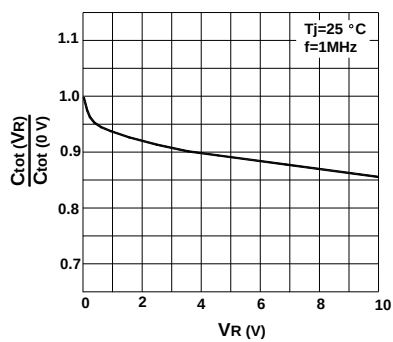
Forward characteristics



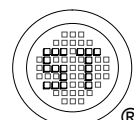
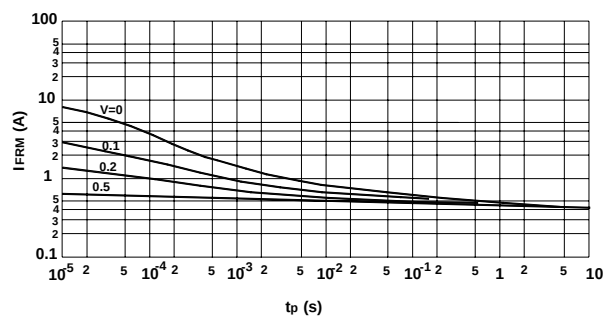
Dynamic forward resistance vs. forward current



Reverse capacitance vs. reverse voltage



Ammissible repetitive peak forward current vs. pulse duration





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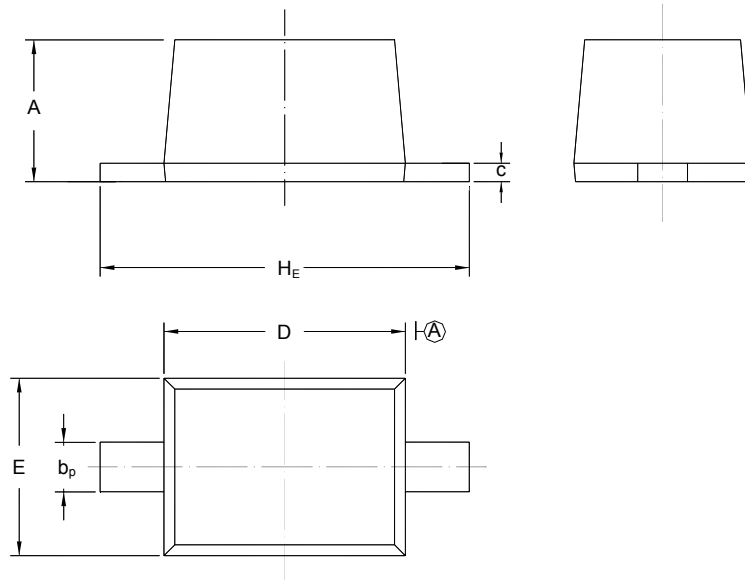
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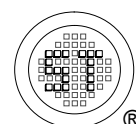
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



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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