



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

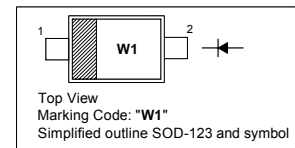
1N4448W

Silicon Epitaxial Planar Switching Diode

Fast Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

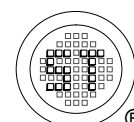


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current (at $t = 1 \mu\text{s}$)	I_{FSM}	4	A
Power Dissipation	P_d	400	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 150 \text{ mA}$	V_F	0.62 - - -	0.72 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 80 \text{ V}$ 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	- - - -	100 25 50 30	nA nA μA μA
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	80	-	V
Total Capacitance at $V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}, I_{tr} = 0.1 \times I_R, R_L = 100 \Omega$	t_{rr}	-	4	ns



Dated : 17/03/2010 Rev:01



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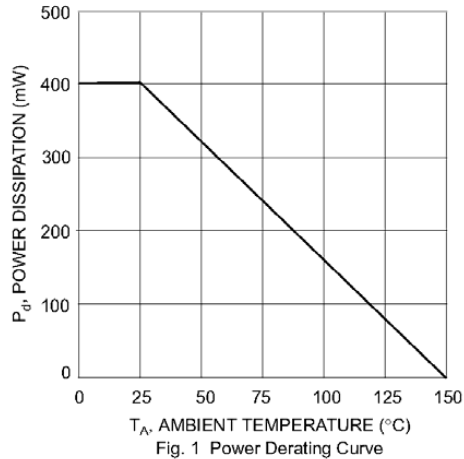


Fig. 1 Power Derating Curve

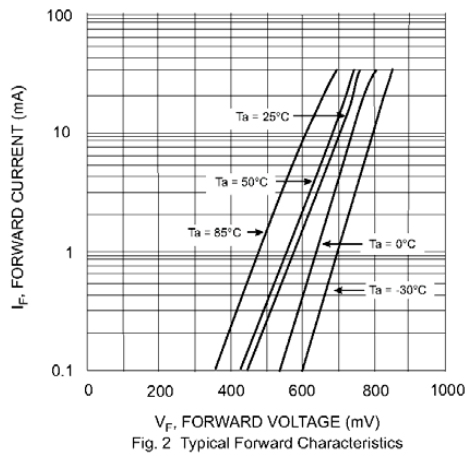


Fig. 2 Typical Forward Characteristics

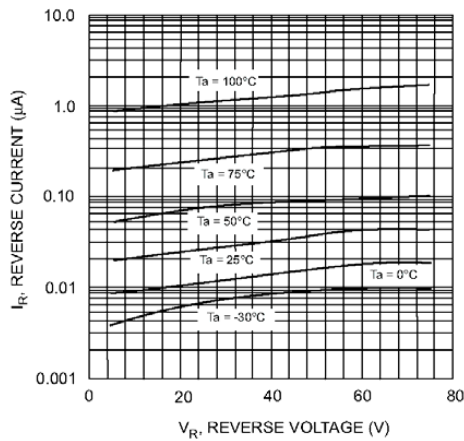


Fig. 3 Typical Reverse Characteristics

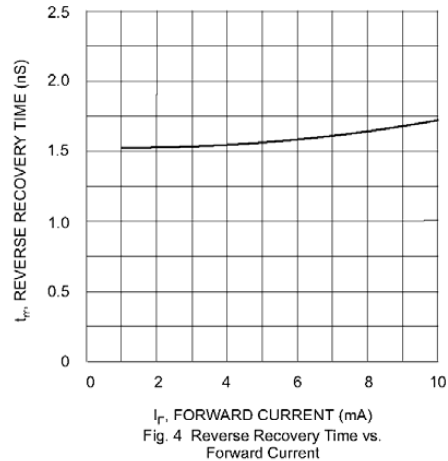


Fig. 4 Reverse Recovery Time vs. Forward Current

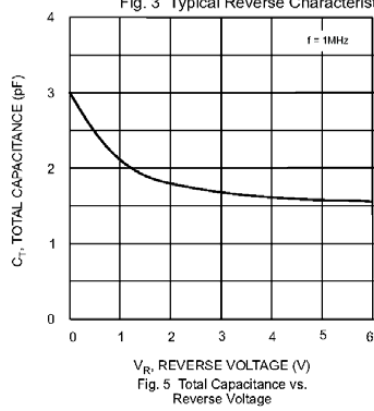
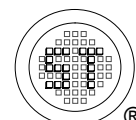


Fig. 5 Total Capacitance vs. Reverse Voltage





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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123

