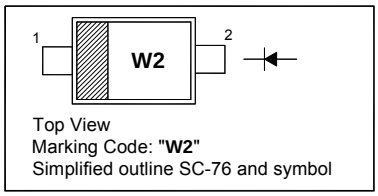
1N4448WS-AH

Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**W2**"
Simplified outline SC-76 and symbol

Features

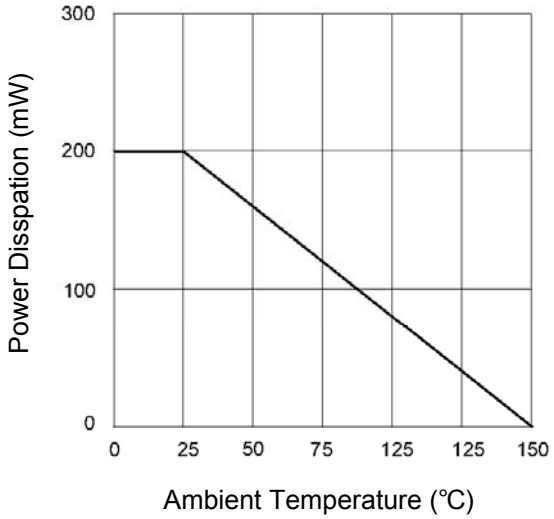
- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant

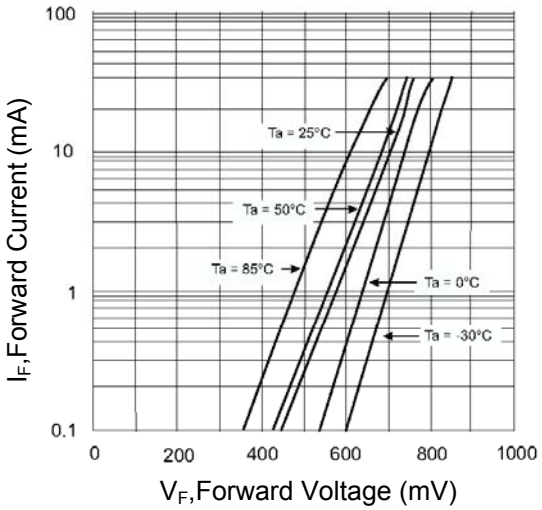
Absolute Maximum Ratings (T_a = 25 °C)

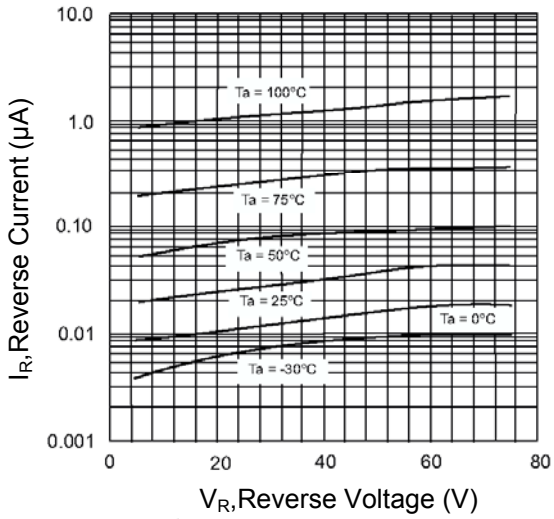
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current (at t = 1 μs)	I_{FSM}	0.5	A
Power Dissipation	P_d	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

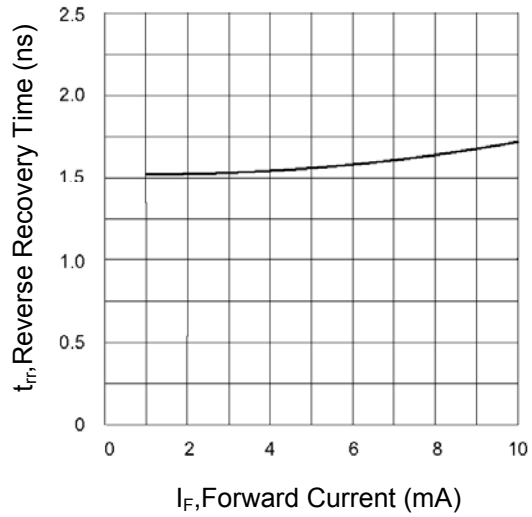
Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 5 mA at I_F = 10 mA at I_F = 100 mA at I_F = 150 mA	V_F	 0.62 - - -	 0.72 0.855 1 1.25	V
Reverse Leakage Current at V_R = 80 V at V_R = 20 V at V_R = 75 V, T_J = 150 °C at V_R = 25 V, T_J = 150 °C	I_R	 - - - -	 100 25 50 30	 nA nA μA μA
Reverse Breakdown Voltage at I_R = 100 μA	$V_{(BR)R}$	80	-	V
Total Capacitance at V_R = 0.5 V, f = 1 MHz	C_{tot}	-	4	pF
Reverse Recovery Time at I_F = I_R = 10 mA, I_{rr} = 0.1 X I_R , R_L = 100 Ω	t_{rr}	-	4	ns


Power Disspation (mW)
300
200
100
0
0
25
50
75
125
125
150
Ambient Temperature (℃)

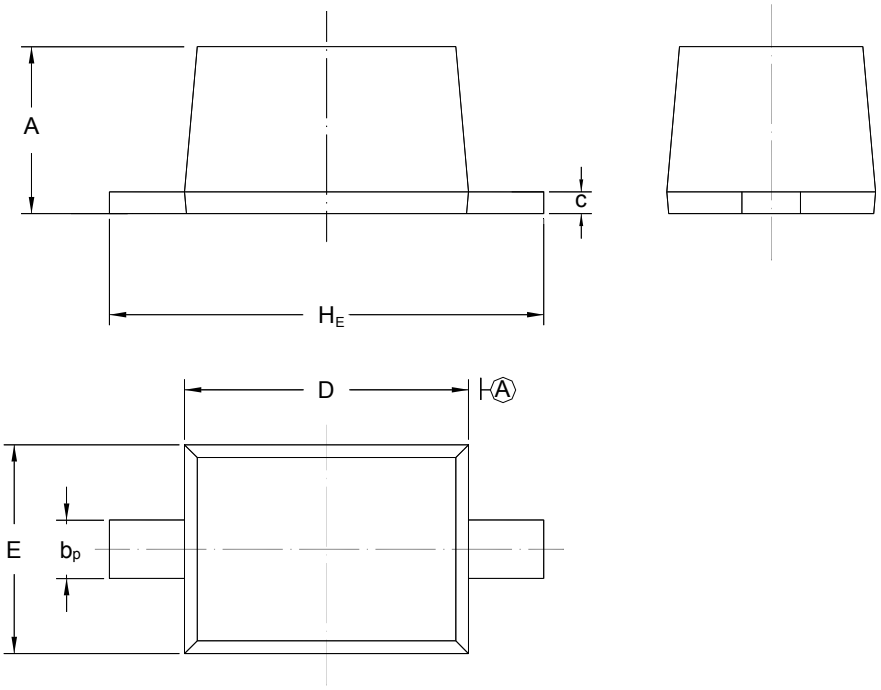

I_F,Forward Current (mA)
100
10
1
0.1
Ta = 25°C
Ta = 50°C
Ta = 85°C
Ta = 0°C
Ta = -30°C
0
200
400
600
800
1000
V_F,Forward Voltage (mV)


I_R,Reverse Current (μA)
10.0
1.0
0.10
0.01
0.001
Ta = 100°C
Ta = 75°C
Ta = 50°C
Ta = 25°C
Ta = 0°C
Ta = -30°C
0
20
40
60
80
V_R,Reverse Voltage (V)


t_{rr},Reverse Recovery Time (ns)
2.5
2.0
1.5
1.0
0.5
0
0
2
4
6
8
10
I_F,Forward Current (mA)

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

Recommended Soldering Footprint