

Silicon Epitaxial Planar Switching Diode

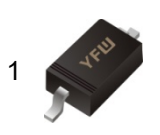

FEATURES

- ◆For surface mounted applications
- ◆Glass Passivated Chip Junction
- ◆Fast reverse recovery time
- ◆Ideal for automated placement
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: SOD-323
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 5.48mg / 0.00019oz

Pinning

1.Cathode	2.Anode
	
	
SOD-323	

Marking Code

1N4448WS	T5
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Absolute Maximum Ratings (Ta = 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 Ta = 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, $I_{rr} = 0.1 \times I_R$, $R_L = 100$ Ω	t_{rr}	-	4	ns

Typical Characteristics

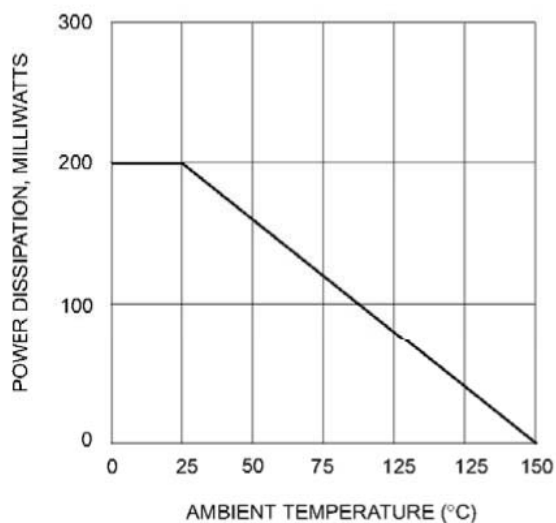


Fig. 1 Forward Current Derating Curve

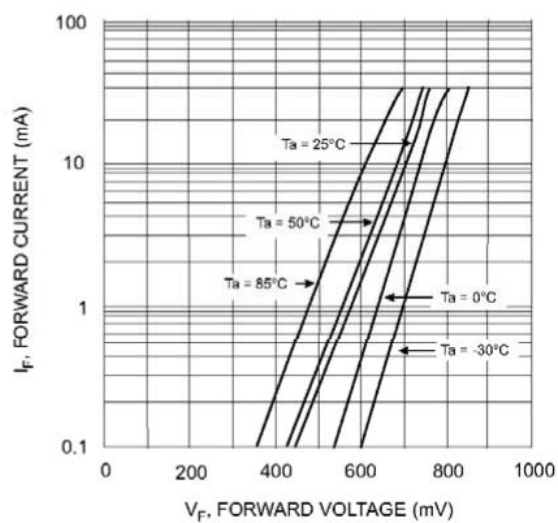


Fig. 2 Typical Forward Characteristics

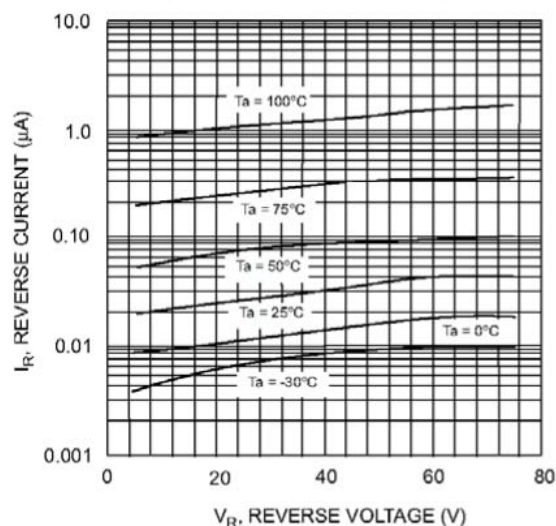


Fig. 3 Typical Reverse Characteristics

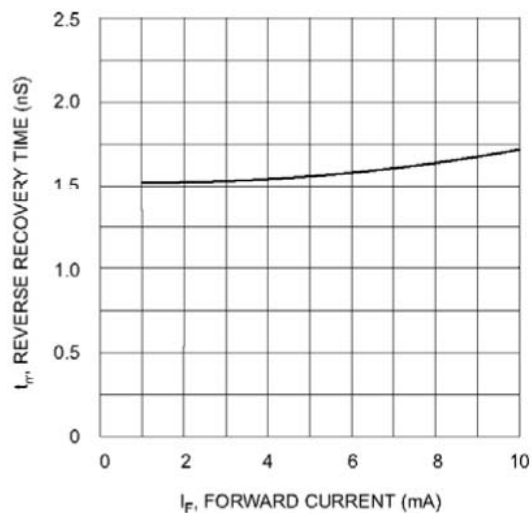


Fig. 4 Reverse Recovery Time vs. Forward Current

Ordering information

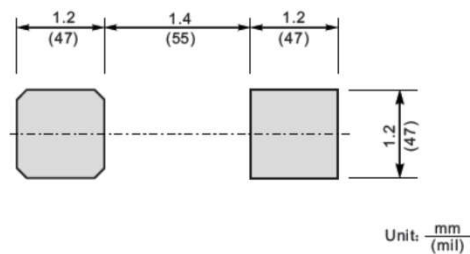
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



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