

■ Switching Diodes

**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-123
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 16mg / 0.00056oz

**Absolute Maximum Ratings at 25 °C**


Parameter	Symbols	1N4448W	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	75	V
Continuous Forward Current	$I_F$	300	mA
Non-reptitive Peak Forward Surge Current at 1ms	$I_{FSM}$	4	A
Total Power Dissipation	$P_{tot}$	357	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

**Characteristics at  $T_a = 25\text{ °C}$**

Parameter	Symbols	1N4448W	Units
Reverse Breakdown Voltage at $I_R = 1\mu A$	$V_{(BR)R}$	75	V
Maximum Forward Voltage	at 1 mA	0.715	V
	at 10 mA	0.855	
	at 100 mA	1.00	
	at 150 mA	1.25	
	at 300 mA	1.50	
Peak Reverse Current	at $V_R = 20V$ $T_j = 25\text{ °C}$	0.025	uA
	at $V_R = 75V$ $T_j = 25\text{ °C}$	2.5	
	at $V_R = 25V$ $T_j = 150\text{ °C}$	30	
	at $V_R = 75V$ $T_j = 150\text{ °C}$	50	
Typical Junction Capacitance $f = 1MHz, V_R = 4V$	$C_j$	4	pF
Maximum Reverse Recovery Time	$T_{rr}$ Typical	4	nS

(1) Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$

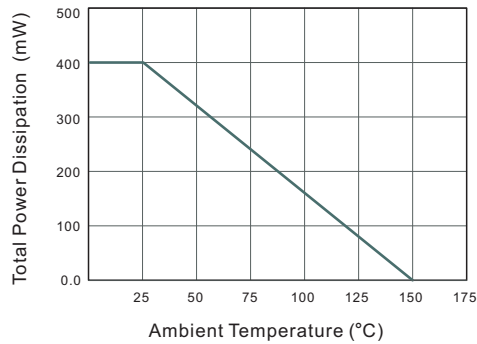
**Pinning**

1.Cathode	2.Anode
	
SOD-123	

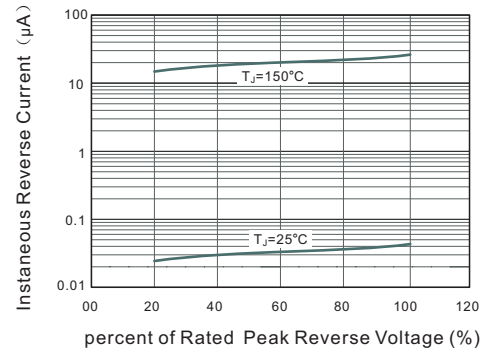
**Marking Code**

1N4448W	T5
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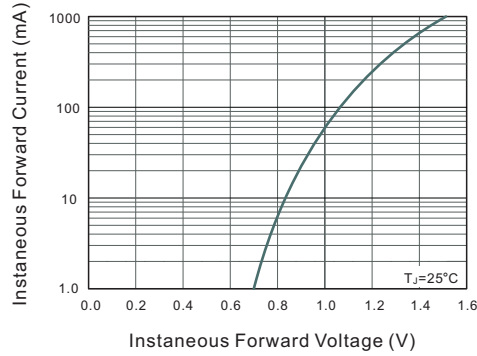
**Fig.1 Power Derating Curve**



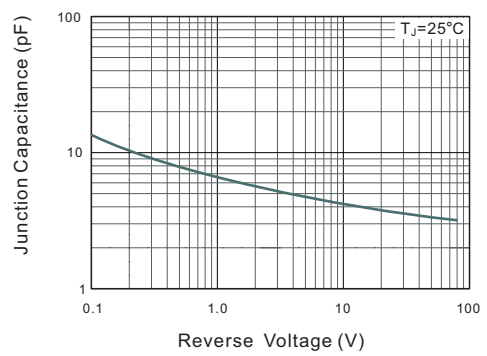
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



### Ordering information

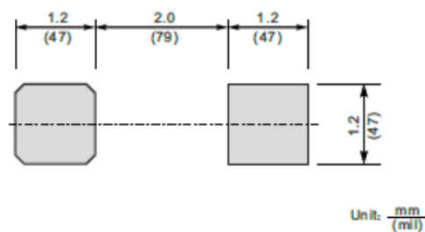
Package	Packing Description	Packing Quantity
SOD-123	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

### Package Dimensions

#### SOD-123

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.3	35	51
C	0.09	0.22	3.5	8.7
D	1.5	1.8	59	71
E	2.5	2.8	98	110
E1	3.6	3.9	142	154
b	0.5	0.7	20	28
L1	0.25	0.45	10	18
A1	-	0.2	-	8
∠	9°			

### The recommended mounting pad size



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