

Descriptions

The 1N4001W~1N4007W is rectifier diode , SOD-123FL thin package.

Features

- Reverse voltage : 50 to1000V
- Forward current : 1.0A
- Glass passivated chip Junction Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives for surface mounted applications
- Halogen free product

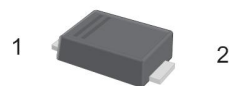
Applications

- General purpose

Equivalent Circuit

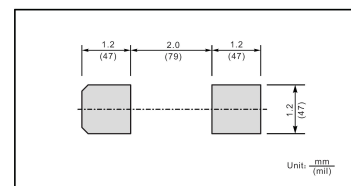


Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



Marking

See Marking Instructions

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating							Unit
		1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_a = 65^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Typical Junction Capacitance ¹⁾	C_j	8							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	90							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

Note:

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

2) P.C.B. mounted with 0.2X0.2" (5X5mm) copper pad areas.

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Rating							Unit
			1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0\text{A}$	1.1							V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	$T_a=25^\circ\text{C}$	5.0							μA
		$T_a=125^\circ\text{C}$	50							μA

Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

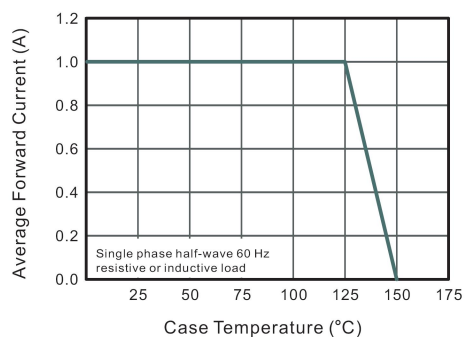


Fig.2 Typical Instantaneous Reverse Characteristics

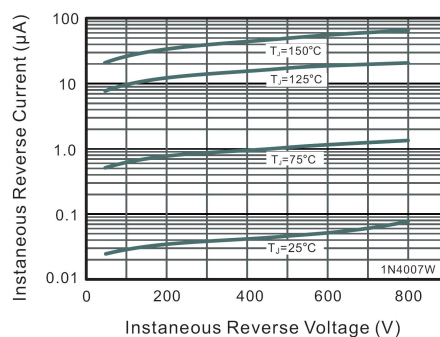


Fig.3 Typical Forward Characteristic

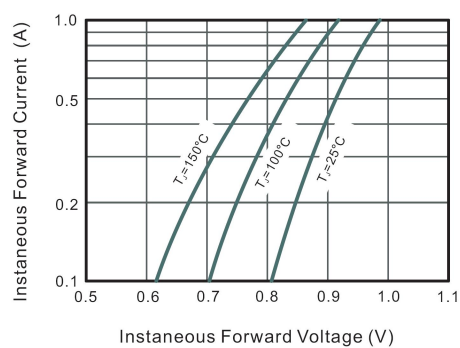


Fig.4 Typical Junction Capacitance

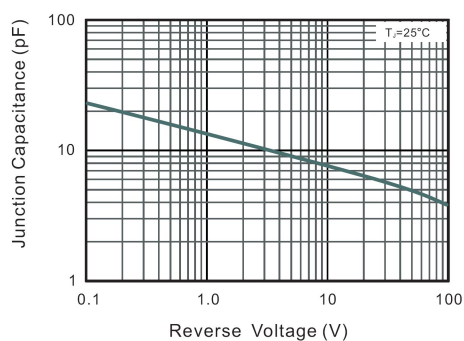
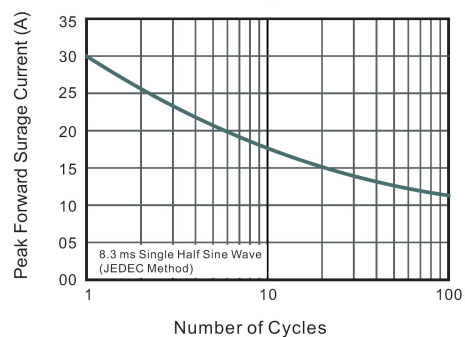
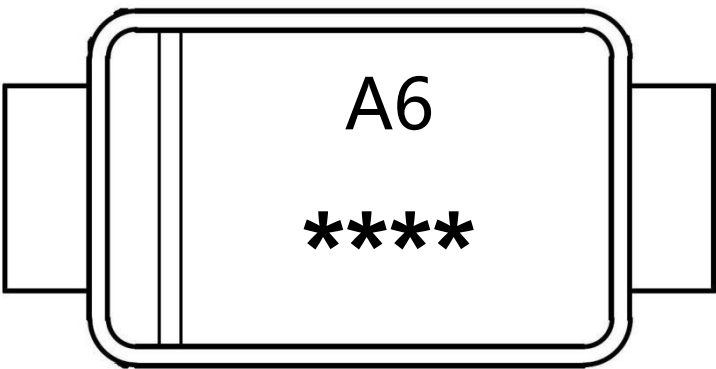


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Instructions



Note:

A6 : Product Type Code

***** : Lot No. Code , The 1st * means:YM Code , The last 3 * means:little Lot No Code

Marking

Type number	Marking code
1N4001W	A1
1N4002W	A2
1N4003W	A3
1N4004W	A4
1N4005W	A5
1N4006W	A6
1N4007W	A7

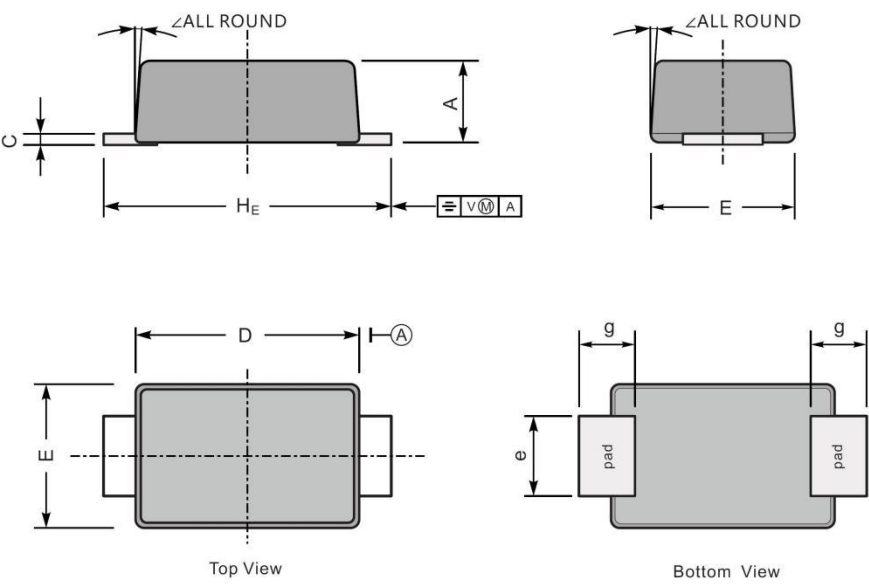
Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123FL	3000	8	24000	5	120000	7" ×11	185X180X105	390X385X205

Package Dimensions

SOD-123FL



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	