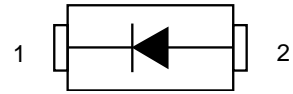


Description

The P1N4148WS is a switching diode
 Pb-Free Packages are available
 SOD-323 package


Feature

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


Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Breakdown Voltage	V_{BR}	$I_R = 1\mu A$	75			V
Reverse Leakage Current	I_R	$V_{RWM} = 20V T=25^\circ C$			0.025	μA
		$V_{RWM} = 25V T=150^\circ C$			30	
		$V_{RWM} = 75V T=25^\circ C$			1	
		$V_{RWM} = 75V T=150^\circ C$			50	
Forward Voltage	V_F	$I_F=1mA$			0.715	V
		$I_F=10mA$			0.855	
		$I_F=50mA$			1.0	
		$I_F=150mA$			1.25	
		$I_F=300mA$			1.5	
Reverse Recovery Time	t_{rr}	$I_F=0.5A I_R=1A I_{rr}=0.25A$		8.0		ns
Diode Capacitance	C	$V_R=4V f = 1MHz$		5.0		pF

Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
RMS Voltage	V_{RMS}	75	V
Continuous Forward Current	I_F	300	mA
No-repetitive Peak Forward Surge Current at 1ms	I_{FSM}	4	A
Power Dissipation	P_{tot}	400	mW
Typical Thermal Resistance	$R_{\theta JA}$	170	$^\circ C/W$
Lead Soldering Temperature	T_L	260 (10 sec)	$^\circ C$
Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^\circ C$

Typical Characteristics

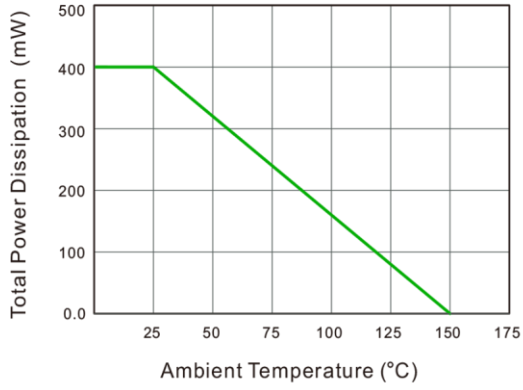


Fig.1 Power Derating Curve

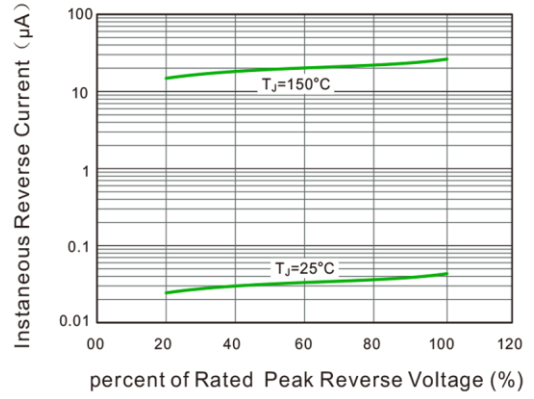


Fig.2 Typical Reverse Characteristics

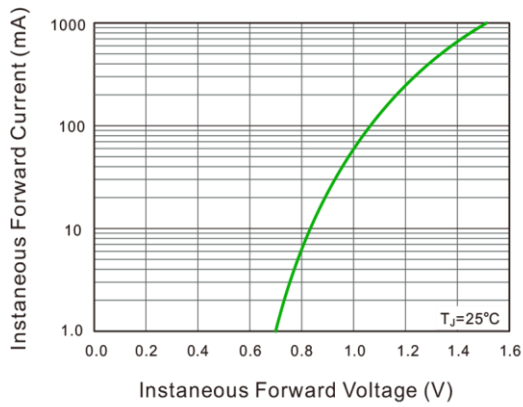


Fig.3 Typical Instantaneous Forward Characteristics

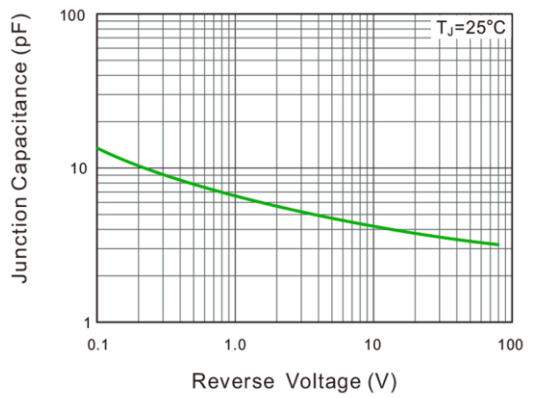
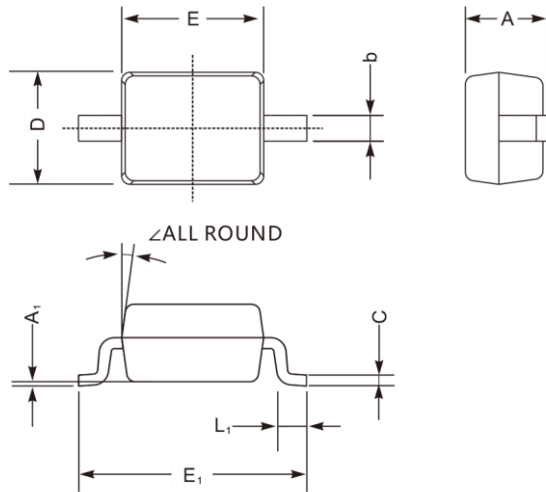
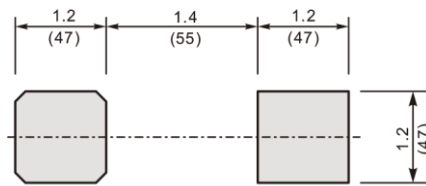


Fig.4 Typical Junction Capacitance

Product dimension (SOD-323)



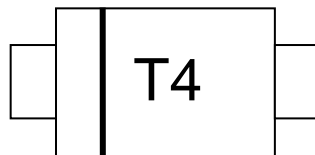
Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.80	1.10	0.031	0.043
C	0.08	0.15	0.003	0.006
D	1.20	1.40	0.047	0.055
E	1.40	1.80	0.055	0.071
E1	2.55	2.75	0.100	0.108
b	0.25	0.40	0.010	0.016
L1	0.20	0.45	0.008	0.018
A1	0.00	0.20	0.000	0.008
∠	9°		9°	



Unit: $\frac{mm}{(mil)}$

Suggested PCB Layout

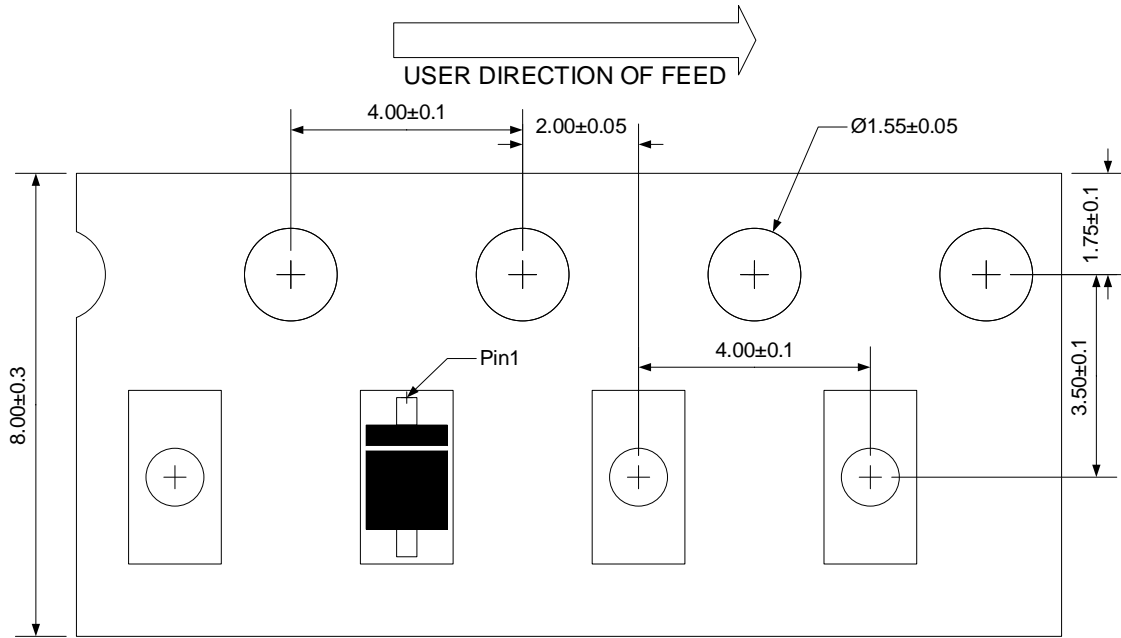
Marking information



Ordering information


Device	Package	Reel	Shipping
P1N4148WS	SOD-323 (Pb-Free)	7"	3000 / Tape & Reel

Load with information



Unit:mm


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