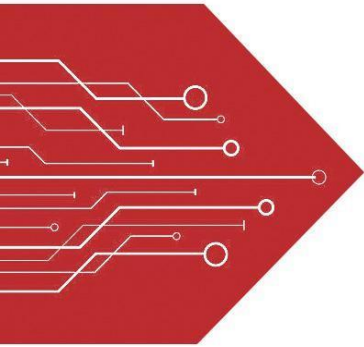


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SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT

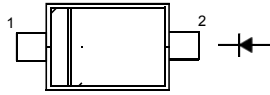


PLED

Product data sheet

Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance



SOD-323

RNNING

PIN	DESCRIPTION
1	Cathode
2	Anode

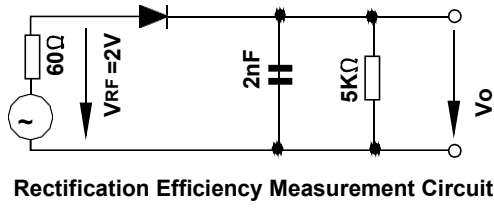
MARK:T4

Absolute Maximum Ratings (T_a = 25 °C)

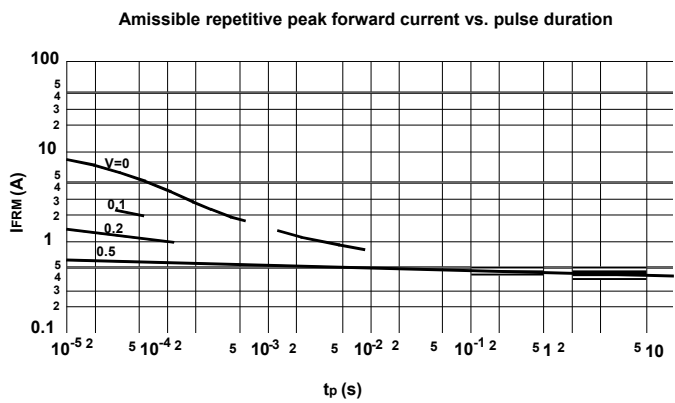
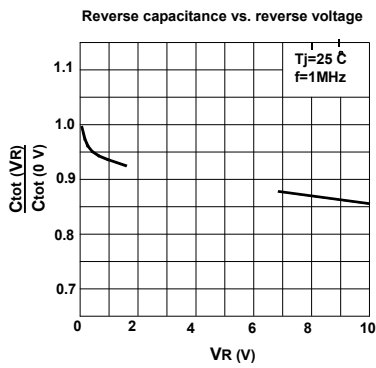
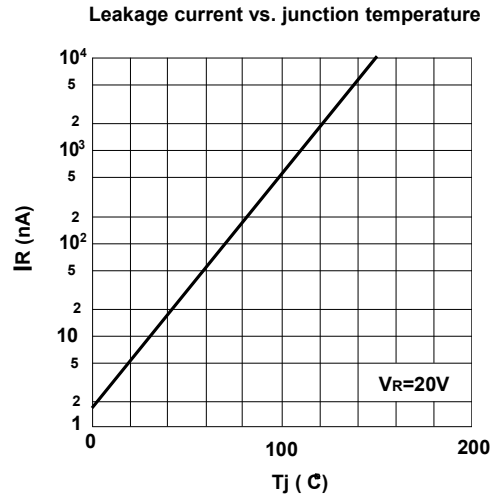
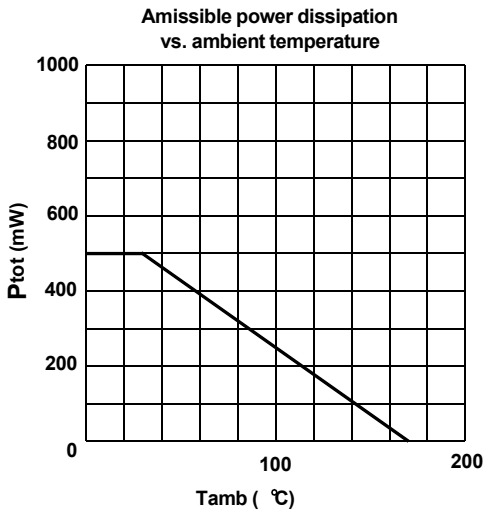
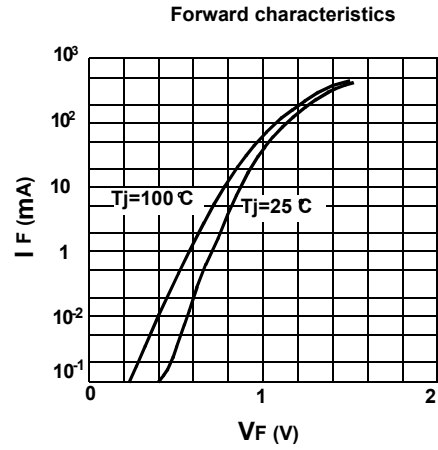
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	150	mA
Non-repetitive Peak Forward Surge Current at t = 1 μs	I _{FSM}	2	A
Power Dissipation	P _{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	R _{θJA}	312	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

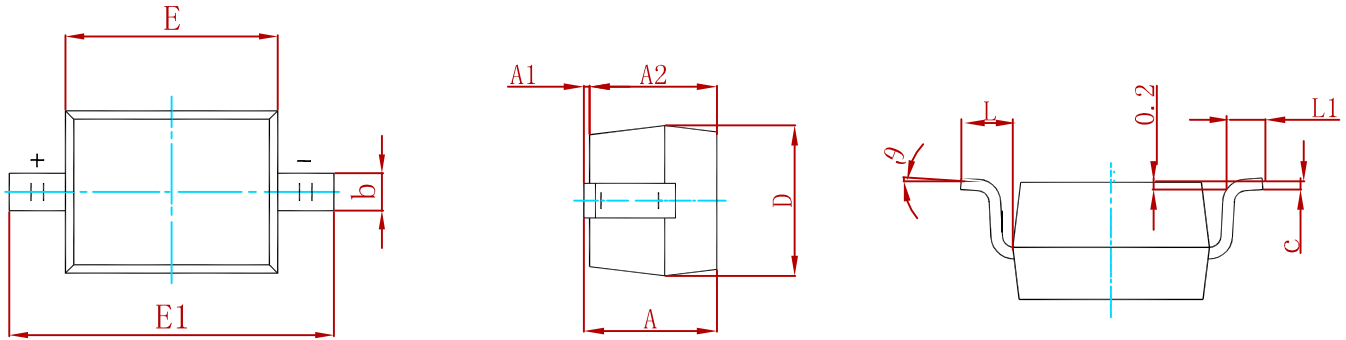
Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I _R = 1 μA	V _{(BR)R}	75	-	V
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at V _R = 75 V at V _R = 20 V at V _R = 75 V, T _j = 150 °C at V _R = 25 V, T _j = 150 °C	I _R	- - - -	1 25 50 30	μA nA μA μA
Total Capacitance at V _R = 0 V, f = 1 MHz	C _T	-	2	pF
Reverse Recovery Time at I _{rr} = 0.1 X I _R , I _F = I _R = 10 mA, R _L = 100 Ω	t _{rr}	-	4	ns



Rectification Efficiency Measurement Circuit

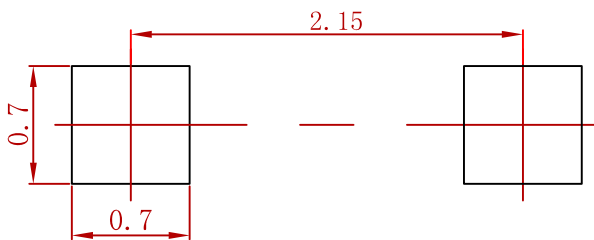


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
1N4148WS-MS	SOD-323	3000

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