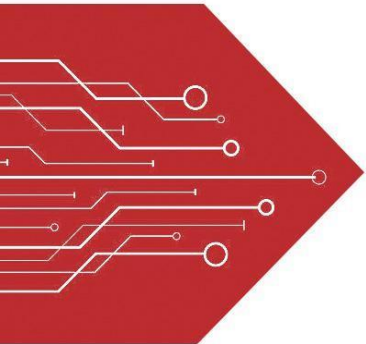


MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT

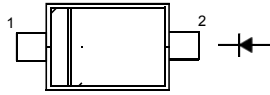


PLED

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

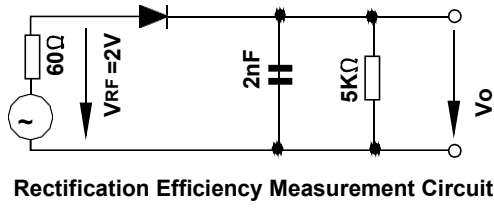
MARK:T4

Absolute Maximum Ratings (T_a = 25 °C)

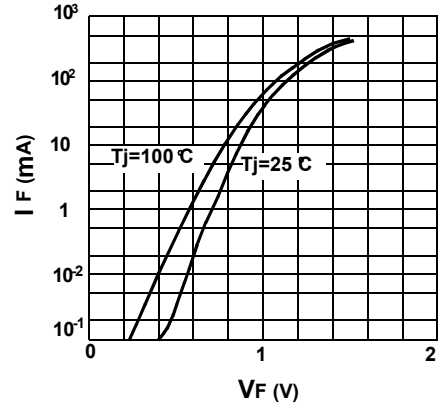
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	150	mA
Non-repetitive Peak Forward Surge Current at t = 1 μs	I _{FSM}	2	A
Power Dissipation	P _{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	R _{θJA}	312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

Characteristics at T_a = 25 °C

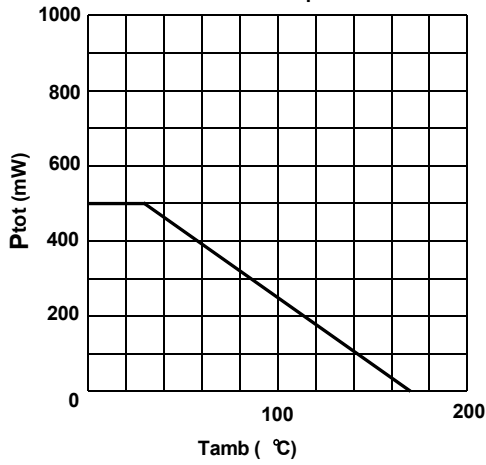
Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I _R = 1 μA	V _{(BR)R}	75	-	V
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at V _R = 75 V at V _R = 20 V at V _R = 75 V, T _j = 150 °C at V _R = 25 V, 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



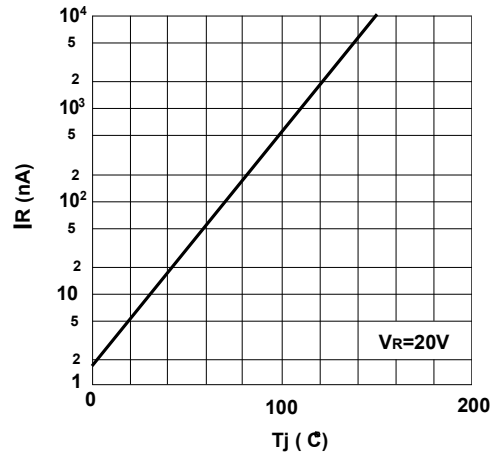
Forward characteristics



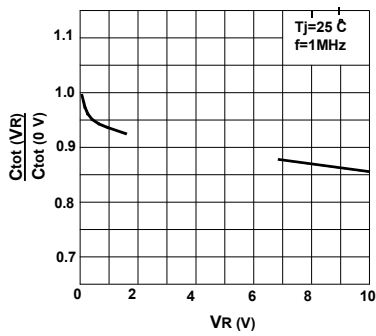
Ammissible power dissipation vs. ambient temperature



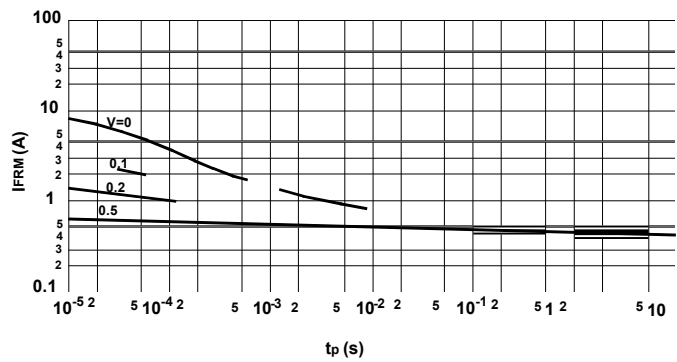
Leakage current vs. junction temperature



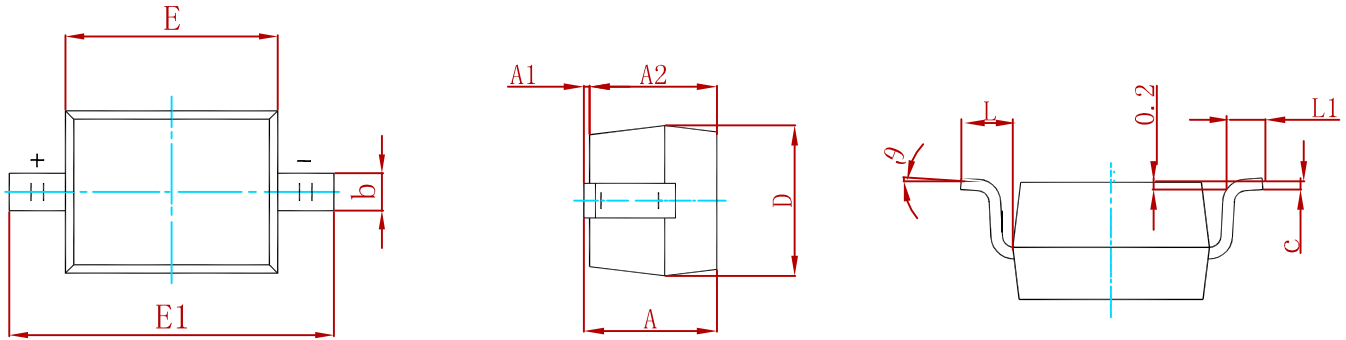
Reverse capacitance vs. reverse voltage



Ammissible repetitive peak forward current vs. pulse duration

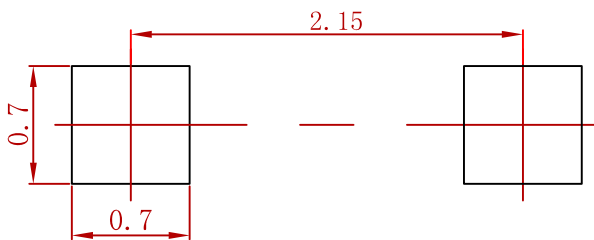


PACKAGE MECHANICAL DATA



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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