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Product data sheet


SOD-523
FEATURES

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

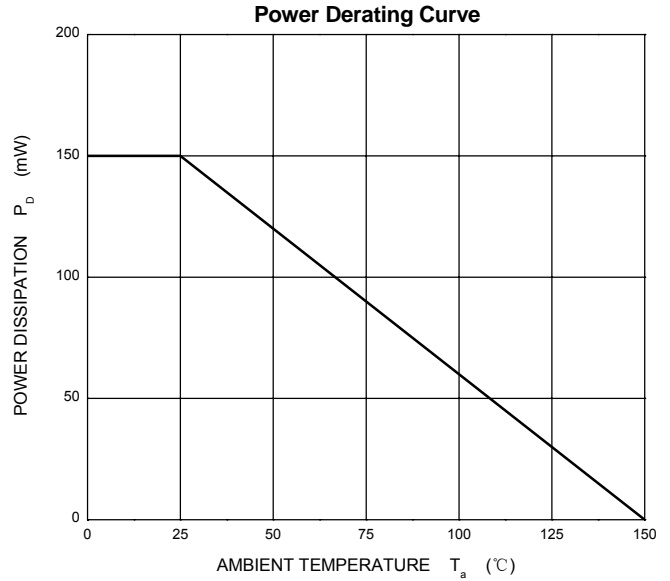
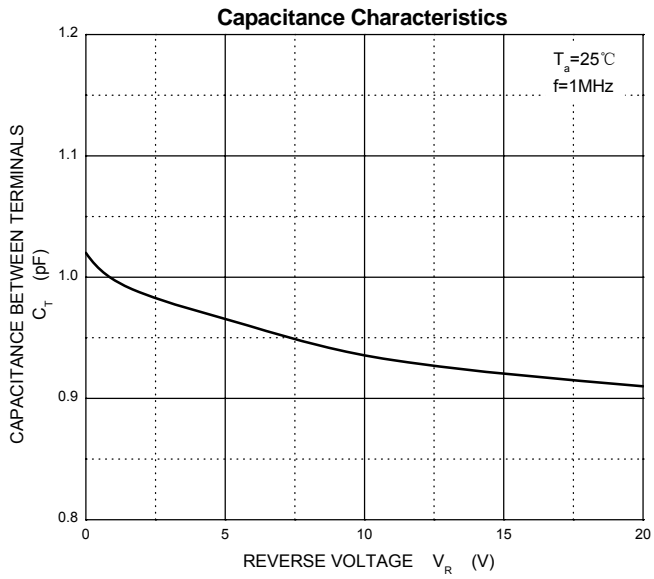
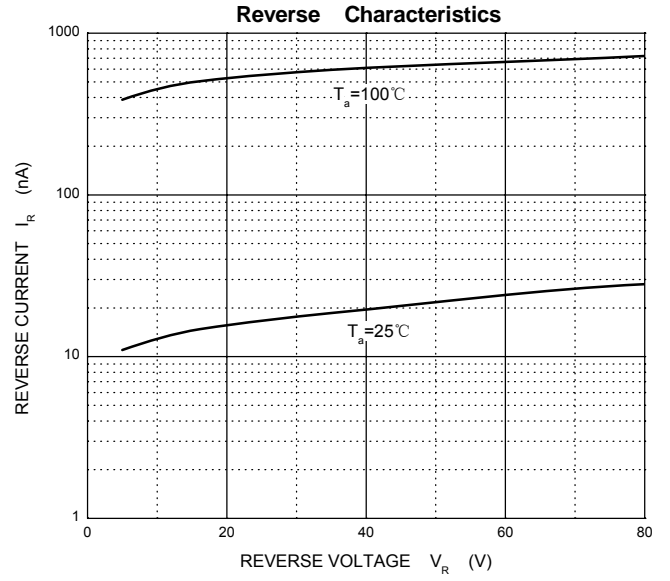
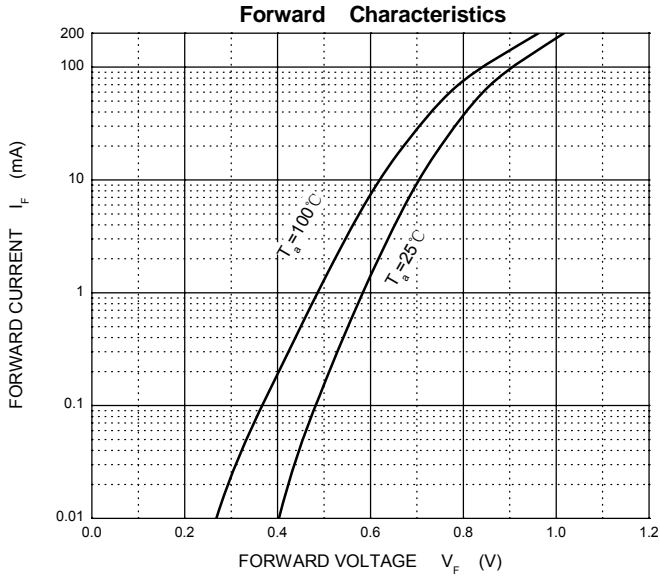
MARKING:T4

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

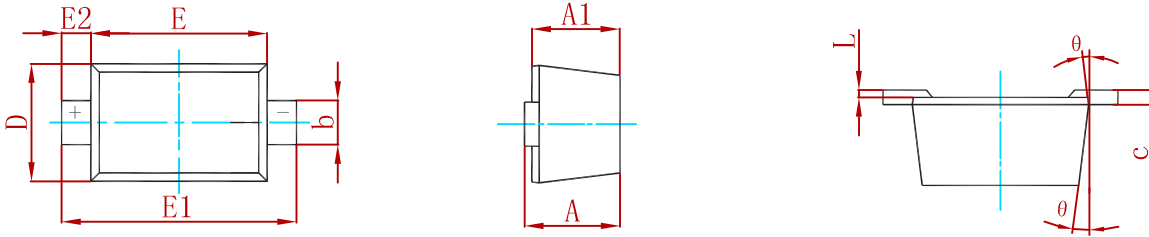
Symbol	Parameter	Value	Unit
V _{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V _R	Reverse Voltage	75	V
V _{RRM}	Peak Repetitive Reverse Voltage		
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	53	V
I _O	Average Rectified Output Current	150	mA
I _{FM}	Forward Continuous Current	300	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	2	A
P _D	Power Dissipation	150	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	833	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =1μA	75			V
Reverse current	I _R	V _R =75V			1	μA
		V _R =20V			25	nA
Forward voltage	V _F	I _F =1mA			0.715	V
		I _F =10mA			0.855	V
		I _F =50mA			1	V
		I _F =150mA			1.25	V
Total capacitance	C _{tot}	V _R =0V,f=1MHz			2	pF
Reverse recovery time	t _{rr}	I _F = I _R =10mA, I _{rr} =0.1*I _R ,R _L =100Ω			4	ns

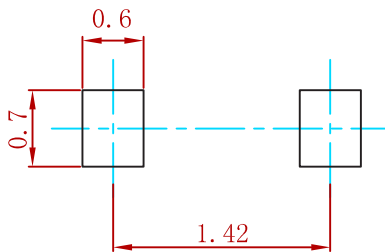


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

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
1N4148WT	SOD-523	3000

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