

SOD-523 Plastic-Encapsulate Diodes

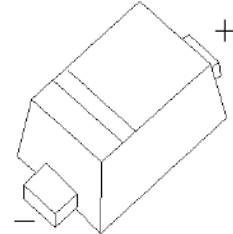
1N4148WT FAST SWITCHING DIODE

SOD-523



FEATURES

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



MARKING:T4



The marking bar indicates the cathode



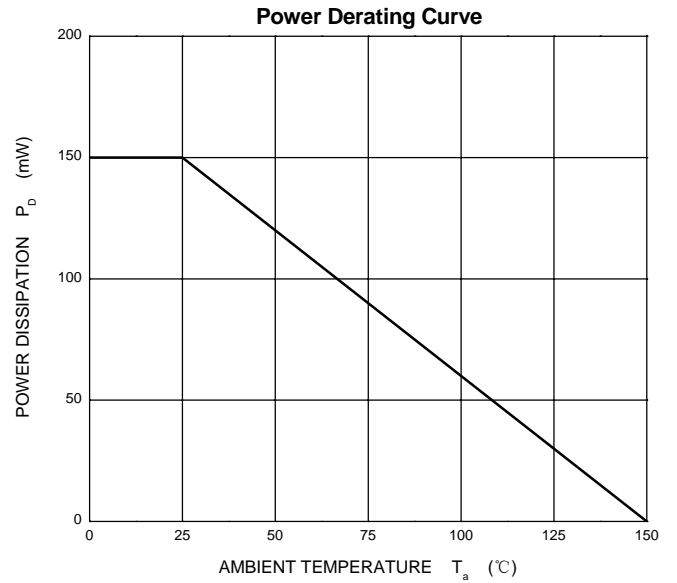
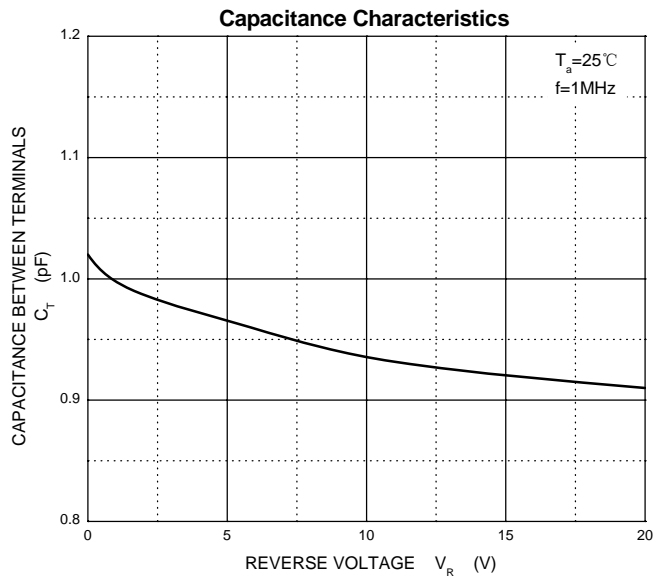
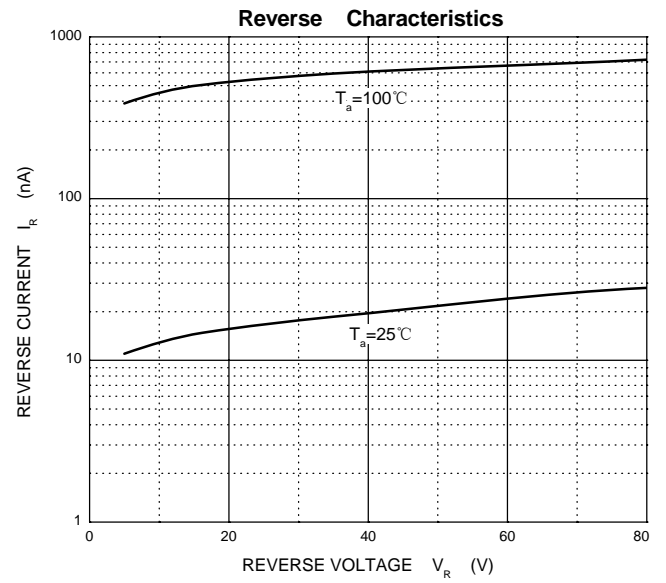
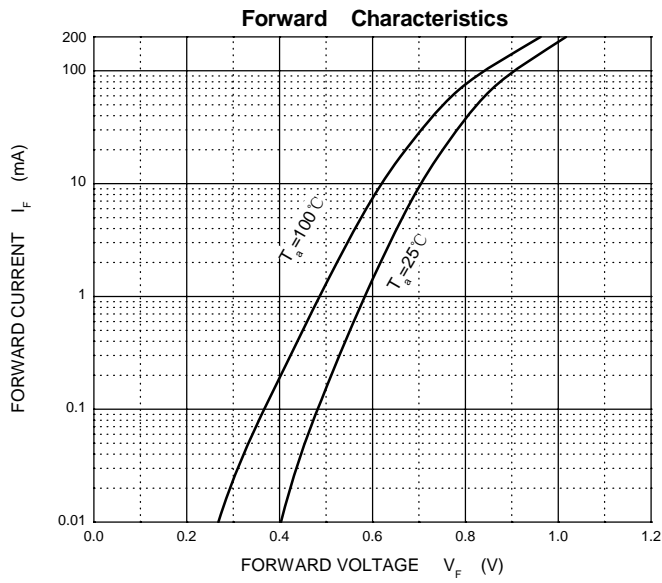
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Peak Repetitive Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Average Rectified Output Current	I _O	150	mA
Forward Continuous Current	I _{FM}	300	mA
Bcb!fYdYh]j YDYU_ : cfk UfX'Gi f[Y7i ffYbl4 hl , "" a g'	I _{FSM}	2	A
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction to Ambient Junction	R _{ΘJA}	833	°C/W
Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

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

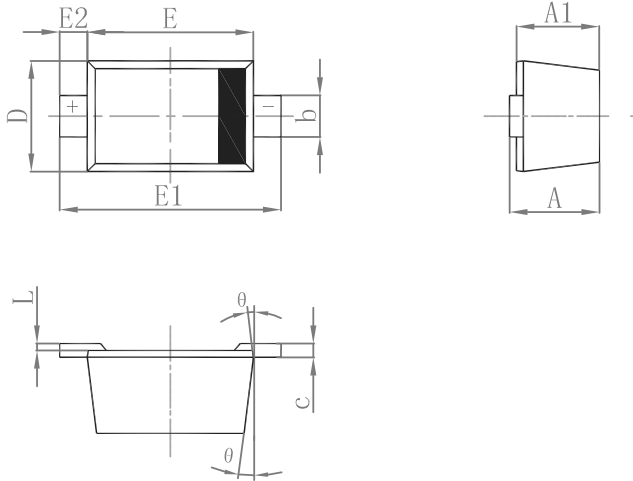
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =1μA	75			V
Reverse current	I _R	V _R =75V			1	μA
		V _R =20V			25	nA
Forward voltage	V _F	I _F =1mA			0.715	V
		I _F =10mA			0.855	V
		I _F =50mA			1	V
		I _F =150mA			1.25	V
Total capacitance	C _{tot}	V _R =0V,f=1MHz			2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

Typical Characteristics



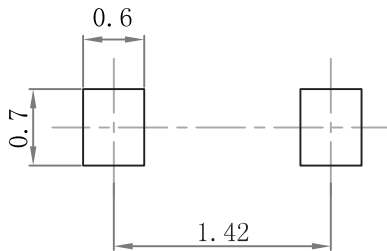
Outline Drawing

SOD-523 Package Outline Dimensions



Sym ol	imensions In Millimeters		imensions 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
K	7° REF		7° REF	

Suggested Pad Layout



Note:

1. Controlling dimension: in/millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

PACKAGE SPECIFICATIONS

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
SOD-523	7'	178	3000	183×188×80	45,000	386×265×215	180,000