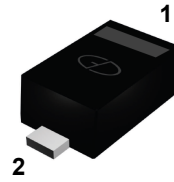


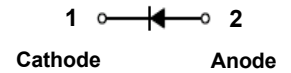
1N4148WT Switching Diode

Features

- Fast switching device
- High conductance
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications



SOD-523



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
RMS Reverse Voltage	V _{R(RMS)}	75	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Non-Repetitive Peak Forward Surge Current (@ t=8.3ms)	I _{FSM}	2.0	A
Power Dissipation	P _D	150	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Max	Units
Forward Voltage	V _F	I _F =1mA	0.715	V
		I _F =10mA	0.855	V
		I _F =50mA	1.0	V
		I _F =150mA	1.25	V
Reverse Current	I _R	V _R =75V (25°C)	1	µA
		V _R =20V (25°C)	25	nA
		V _R =75V (150°C)	50	µA
Capacitance	C _T	V _R =0V, F=1MHz	2	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA, I _{RR} =1mA, R _L =100Ω	4	nS

Typical Electrical Characteristic Curves

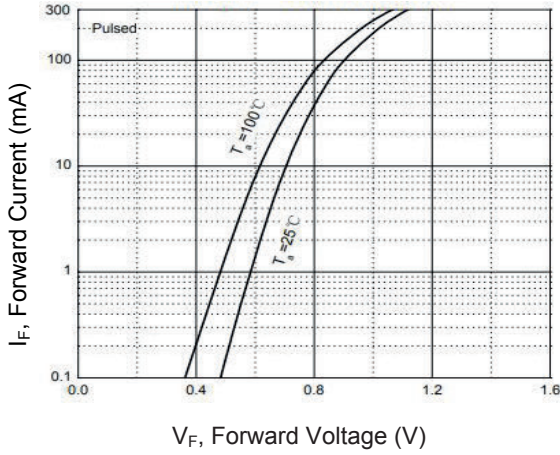


Figure 1. Forward Characteristics

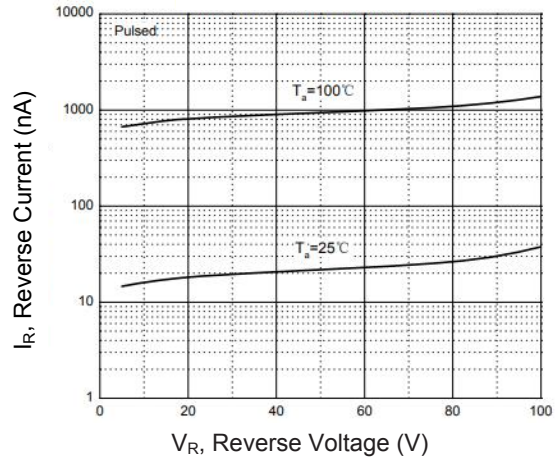


Figure 1. Reverse Characteristics

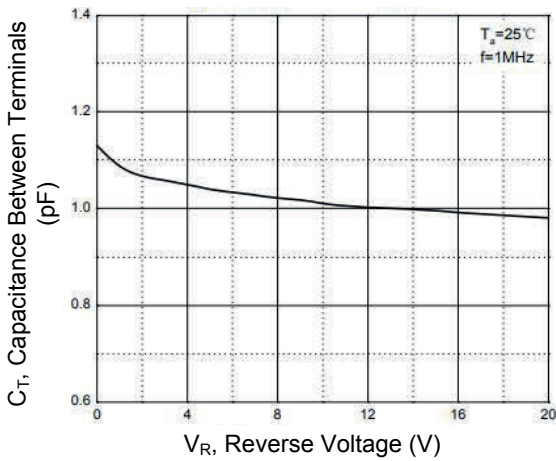


Figure 3. Capacitance Characteristics

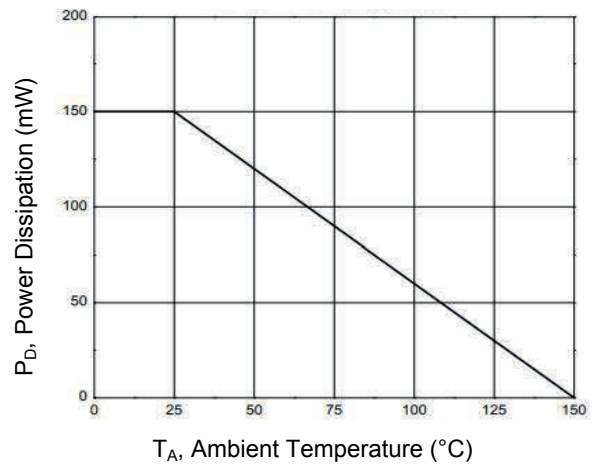
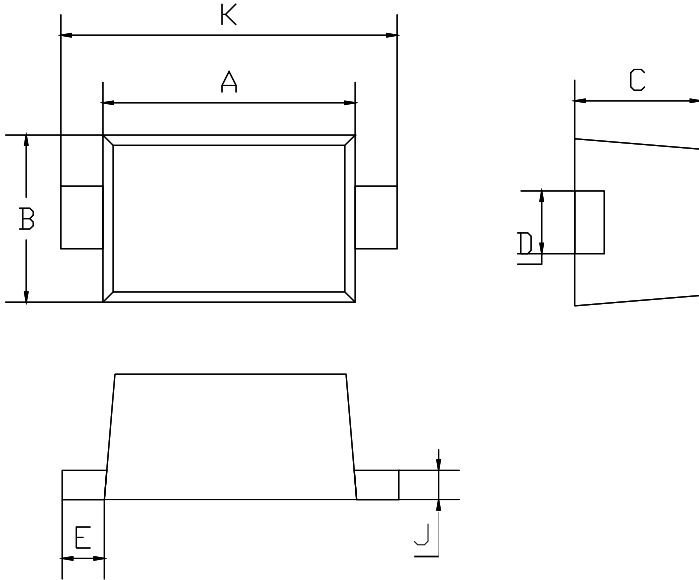


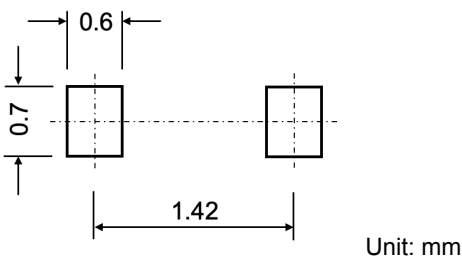
Figure 4. Power Derating Curve

Package Outline Dimensions (SOD-523)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	0.50	0.70	0.020	0.028
D	0.25	0.35	0.010	0.014
E	0.15	0.25	0.006	0.010
J	0.08	0.15	0.003	0.006
K	1.50	1.70	0.059	0.067

Recommended Pad layout



Order Information

Device	Package	Marking	Carrier	Quantity
1N4148WT	SOD-523	T4	Tape & Reel	3,000pcs / Reel