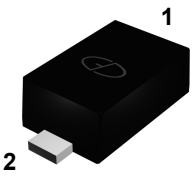
GOOD-ARK
SEMICONDUCTOR

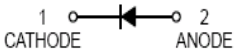
1N4148WT
Switching Diode

Features

- Fast Switching Speed
- Ultra-small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance



Package: SOD-523



Schematic Diagram

Absolute 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	80	V
RMS Reverse Voltage	$V_{R(RMS)}$	80	V
Average Rectified Output Current	I_o	125	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=100 ms	I_{FSM}	2.0 1.0	A
Power Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	833	°C/W
Operating and Storage Temperature Rage	T_J, T_{STG}	-65 to +150	°C

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

Parameter	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	I_R=1.0μA
Forward Voltage	V_F	-	0.715 0.855 1.0 1.25	V	I_F=1mA I_F=10mA I_F=50mA I_F=150mA
Reverse Current	I_R	-	1.0 25	μA nA	V_R=75V V_R=20V
Junction Capacitance	C_J	-	2.0	pF	V_R=0,f=1.0MHz
Reverse Recovery Time	t_{rr}	-	4.0	ns	I_F=I_R=10mA, I_{rr}=0.1×I_R,R_L=100Ω

Typical Electrical Characteristic Curves

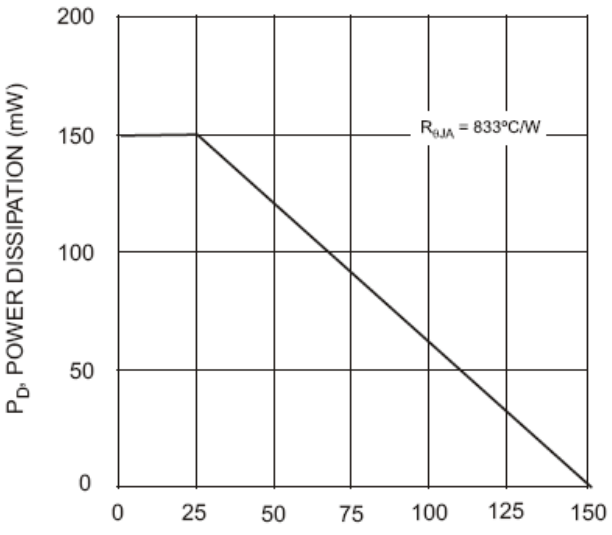


Fig. 1 Derating Curve

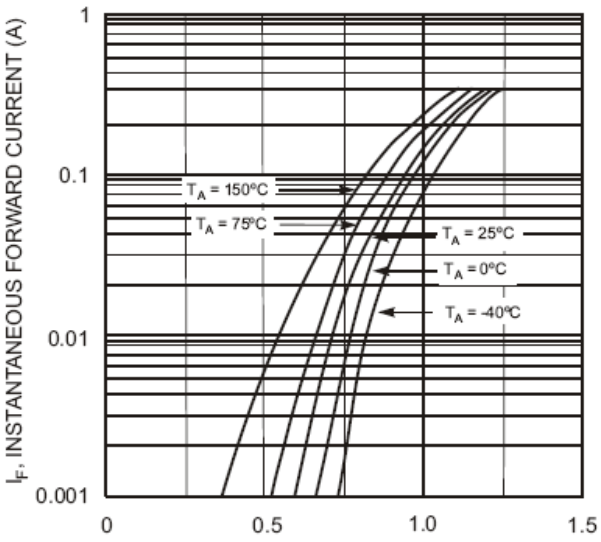


Fig. 2 Forward Characteristics

Typical Electrical Characteristic Curves

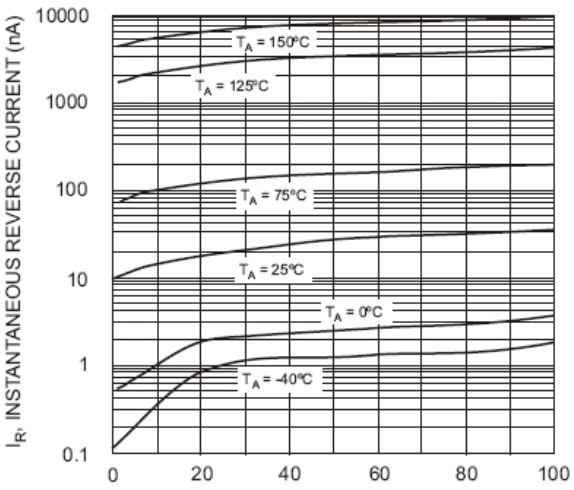


Fig. 3 Typical Reverse Characteristics

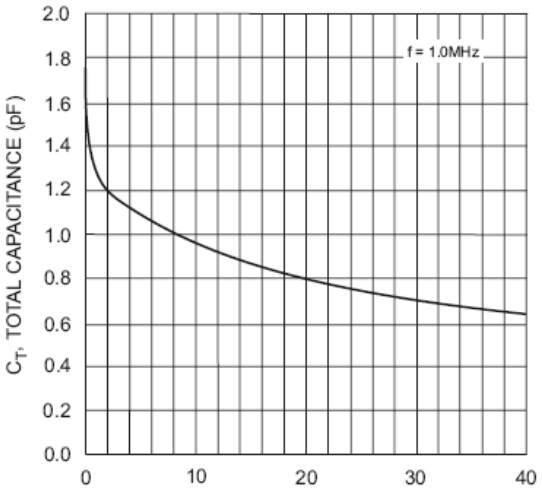
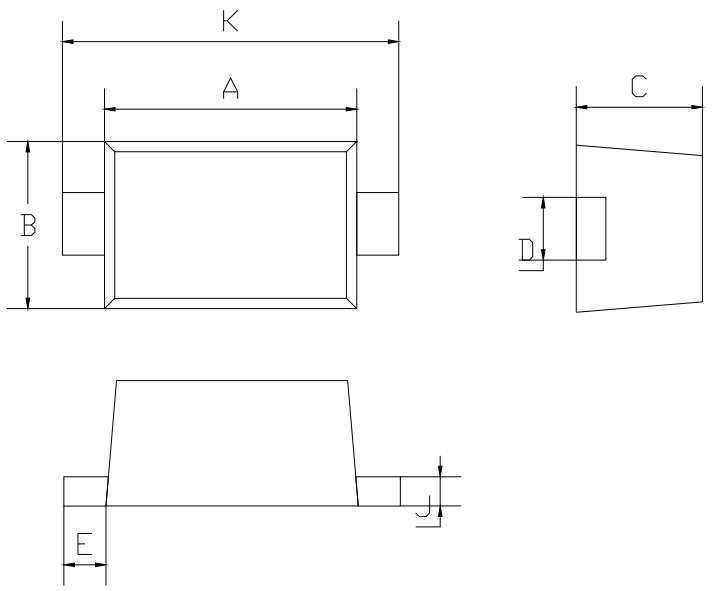


Fig. 4 Typical Capacitance vs. Reverse Voltage

Package Outline Dimensions SOD-523



SOD-523		
Dim	Min	Max
A	1.1	1..3
B	0.7	0.9
C	0.5	0.7
D	0.3 Typical	
E	0.15	0.25
J	0.1 Typical	
K	1.5	1.7
All Dimensions in mm		

Marking and Ordering Information

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