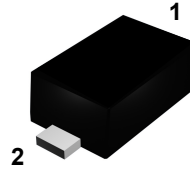
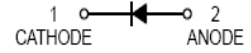


Features

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



Package: SOD-523



Schematic Diagram

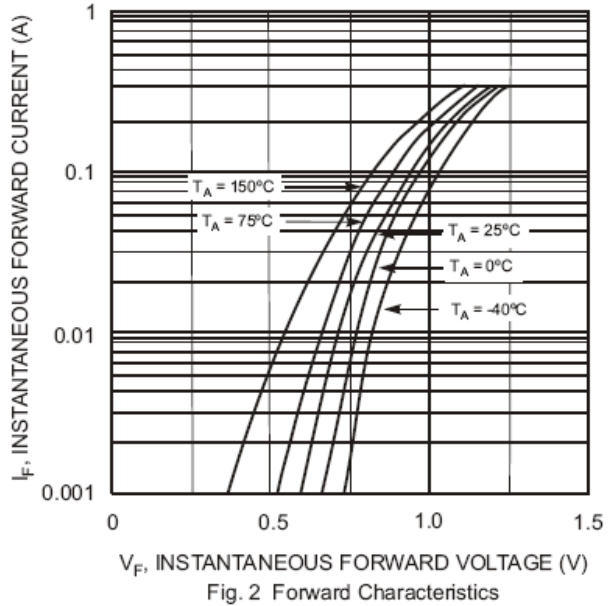
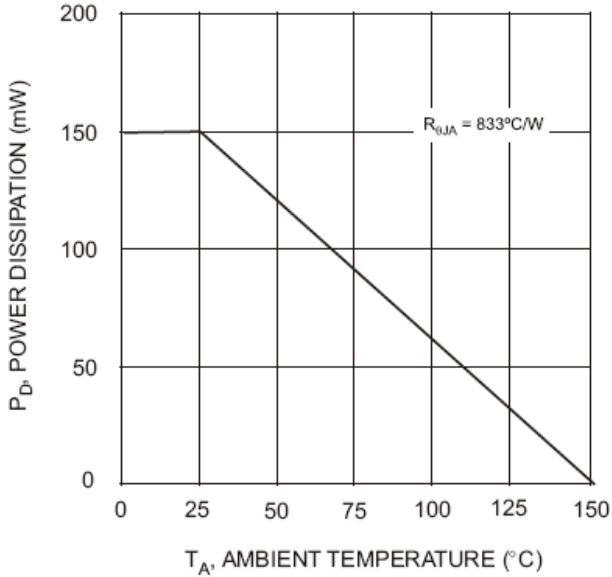
Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

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	I _{FSM}	2.0	A
@t=100 ms		1.0	
Power Dissipation	P _D	150	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	833	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

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

Typical Electrical Characteristic Curves



Typical Electrical Characteristic Curves

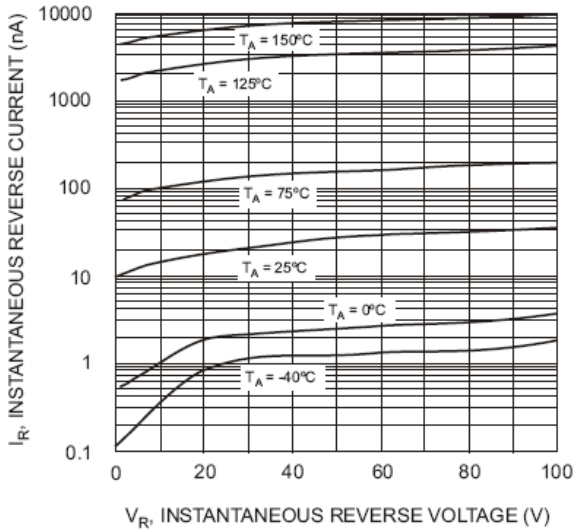


Fig. 3 Typical Reverse Characteristics

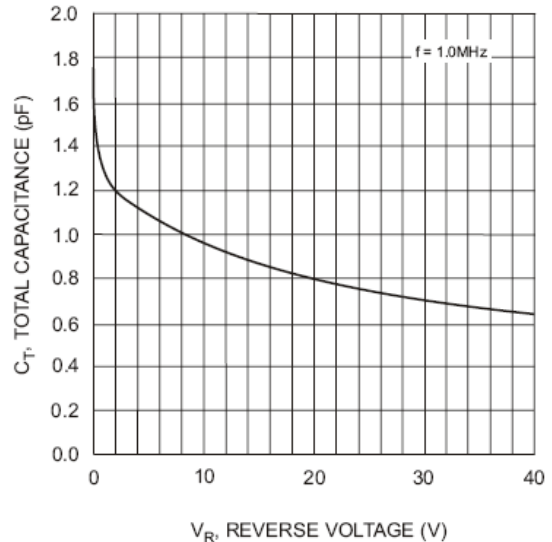
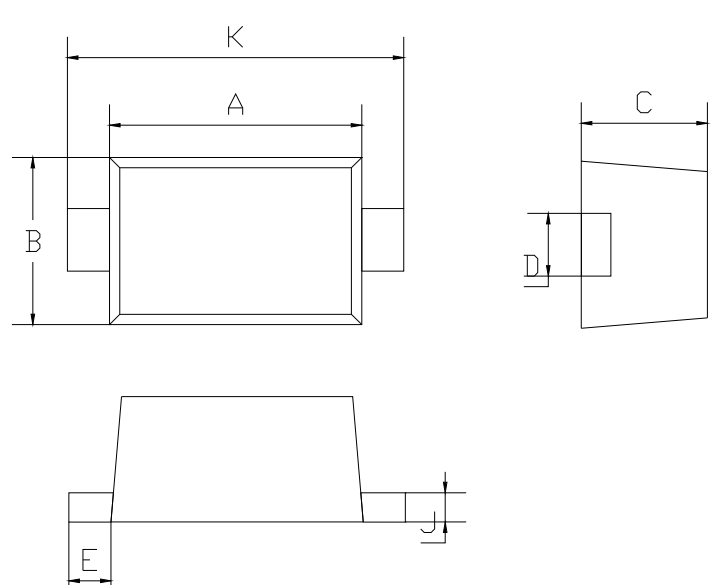


Fig. 4 Typical Capacitance vs. Reverse Voltage

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