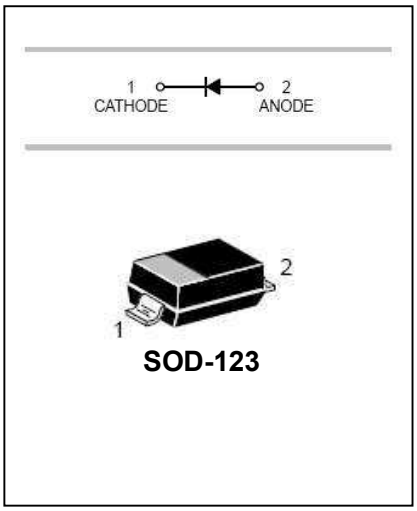
Surface Mount Switching Diode 1N4148W

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- MSL 1

Lead-free



APPLICATIONS

- Surface mount fast switching diode.

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4148W	T4	SOD-123

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	I_o	200	mA
Forward Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_d	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	℃/W
Thermal Resistance Junction to Case	$R_{\theta JC}$	225	℃/W
Operating and Storage Temperature Rage	T_j,T_{STG}	-65 to +150	℃

Surface Mount Switching Diode 1N4148W

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	V_F	-	0.715 0.855 1.0 1.25	V	I_F=1.0mA I_F=10mA I_F=50mA I_F=150mA
Maximum Peak Reverse Current	I_{RM}	-	2.5 50 30 25	μA μA μA nA	V_R=75V V_R=75V，T_j=150℃ V_R=25V，T_j=150℃ 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

Notes: 1. Valid provided that terminals are kept at ambient temperature.

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

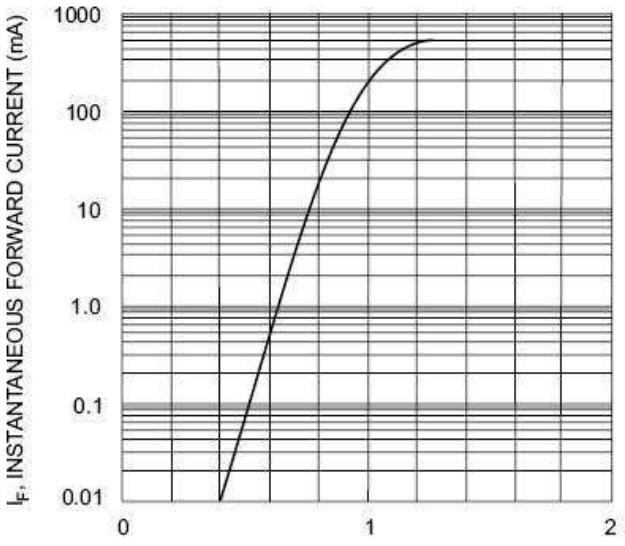


Fig. 1 Forward Characteristics

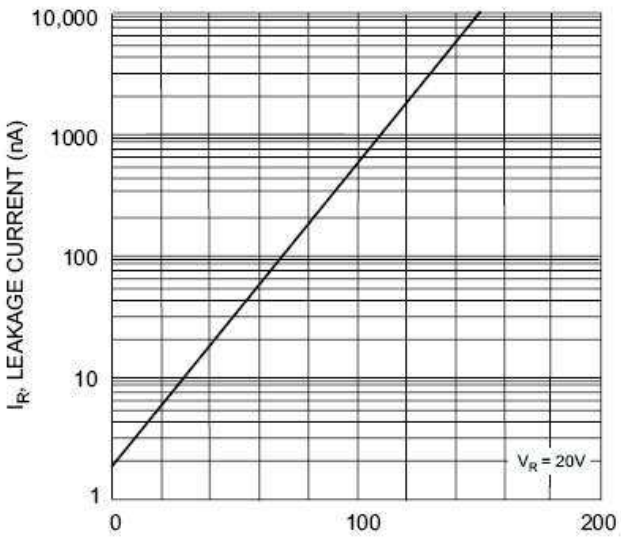
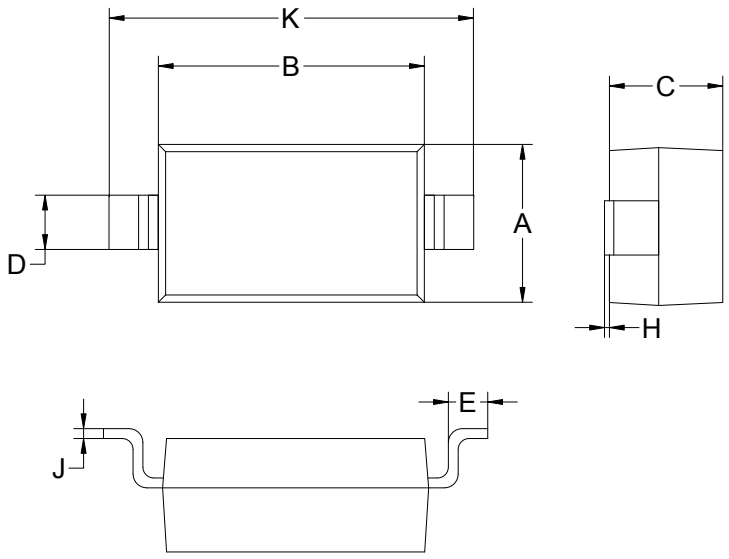


Fig. 2 Leakage Current vs Junction Temperature

Surface Mount Switching Diode 1N4148W

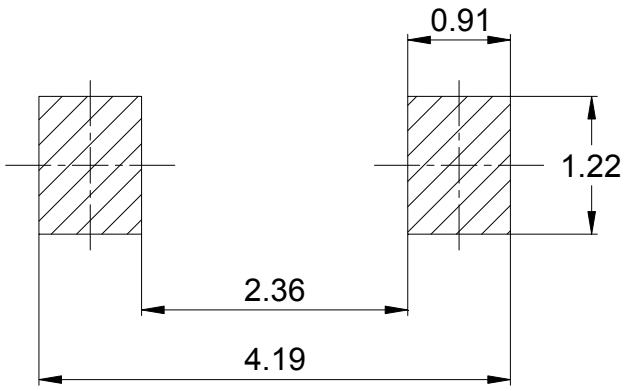
PACKAGE OUTLINE

Plastic surface mounted package SOD-123



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1	1.3
D	0.5	0.6
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm

PACKAGE INFORMATION

Device	Package	Shipping
1N4148W	SOD-123	3000/Tape&Reel