

1N4148W FAST SWITCHING DIODES

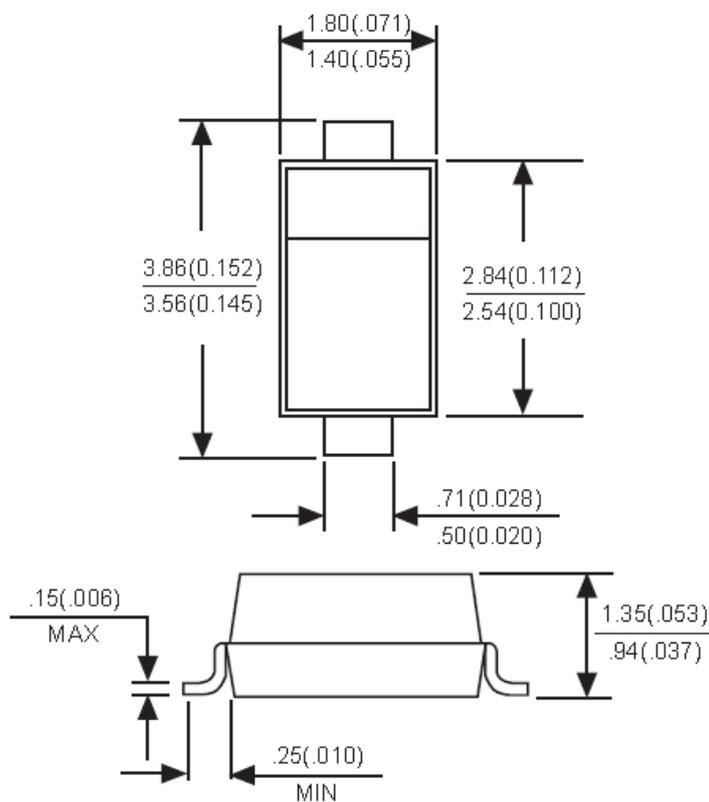
Features:

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data:

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Marking: T4

Mechanical Dimensions: In Inches / mm



SOD-123



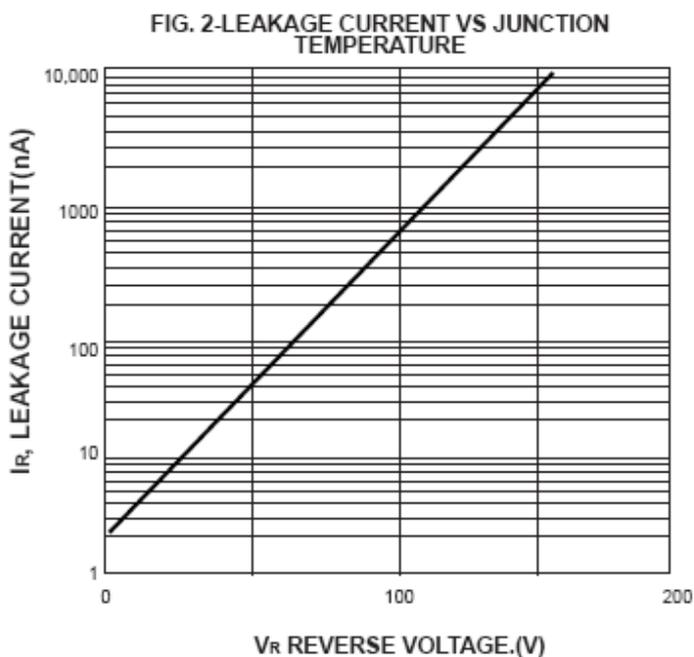
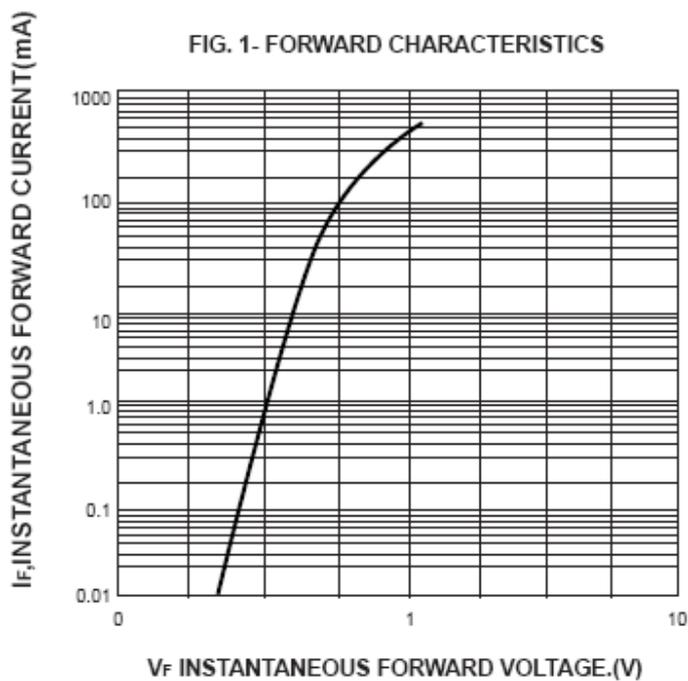
Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_o	150	mA
Peak Forward Current @=1.0us @=1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_d	400	mW
Max. Forward Voltage @ $I_F = 1\text{mA}$ @ $I_F = 10\text{mA}$ @ $I_F = 50\text{mA}$ @ $I_F = 150\text{mA}$	V_{F1} V_{F2} V_{F3} V_{F4}	0.715 0.855 1.000 1.250	V
Max. Peak Reverse Current @ $V_R=75\text{V}$ @ $V_R=20\text{V}$	I_{R1} I_{R2}	1.0 25	μA nA
Max. Junction Capacitance (Note 1)	C_T	2	pF
Max. Reverse Recovery Time (Note 2)	t_{rr}	4	ns
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	315	K/W
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V

Note: 1. $V_R=0\text{V}$, $f=1.0\text{MHz}$

2. $I_F=I_R=10\text{mA}$, $I_{rr}=0.1X I_R$, $R_L=100\ \Omega$





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