

1N4148WL

Switching Diodes

Features

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



■ Simplified outline(SOD-123FL)

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

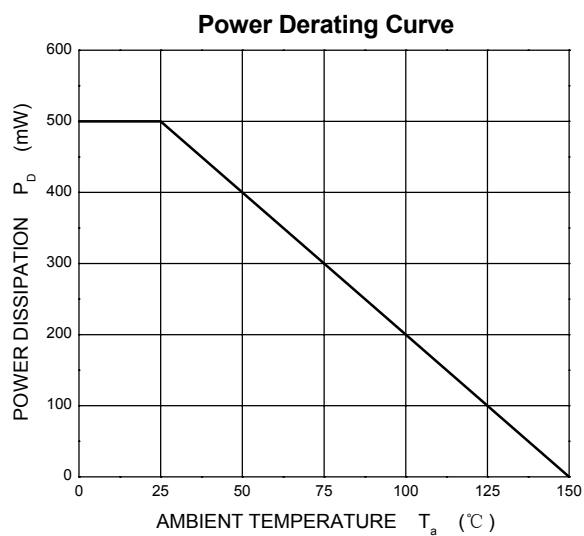
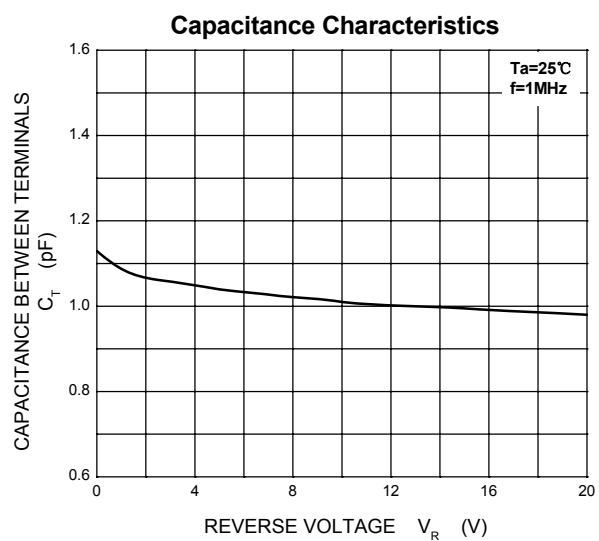
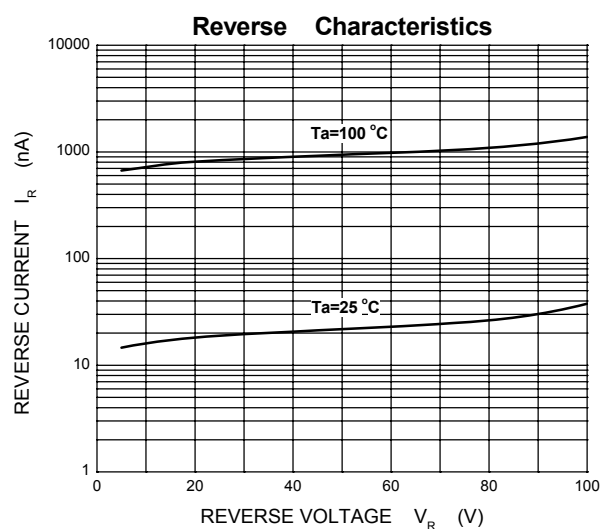
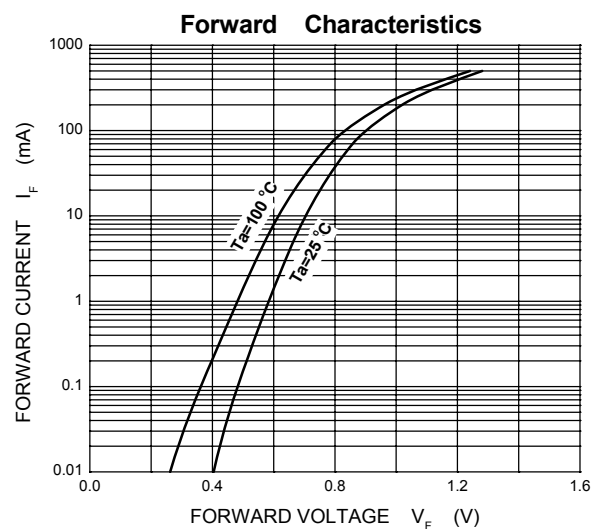
Parameter	Symbol	Rating	Unit
Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	71	
Average Rectified Output Current	I _O	150	mA
Forward Continuous Current	I _{FM}	300	
Peak Forward Surge Current @ t=1us	I _{FSM}	2	A
@ t =1s		1	
Power Dissipation	P _d	500	mW
Thermal Resistance Junction to Ambient	R θ JA	250	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100\mu\text{A}$	100			V
Forward voltage	V_{F1}	$I_F = 1\text{mA}$			0.715	
	V_{F2}	$I_F = 10\text{mA}$			0.855	
	V_{F3}	$I_F = 50\text{mA}$			1	
	V_{F4}	$I_F = 150\text{mA}$			1.25	
Reverse voltage leakage current	I_{R1}	$V_R = 75\text{V}$			1	μA
	I_{R2}	$V_R = 20\text{V}$			25	nA
Junction capacitance	C_j	$V_R = 0\text{V}, f = 1\text{MHz}$			2	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$			4	ns

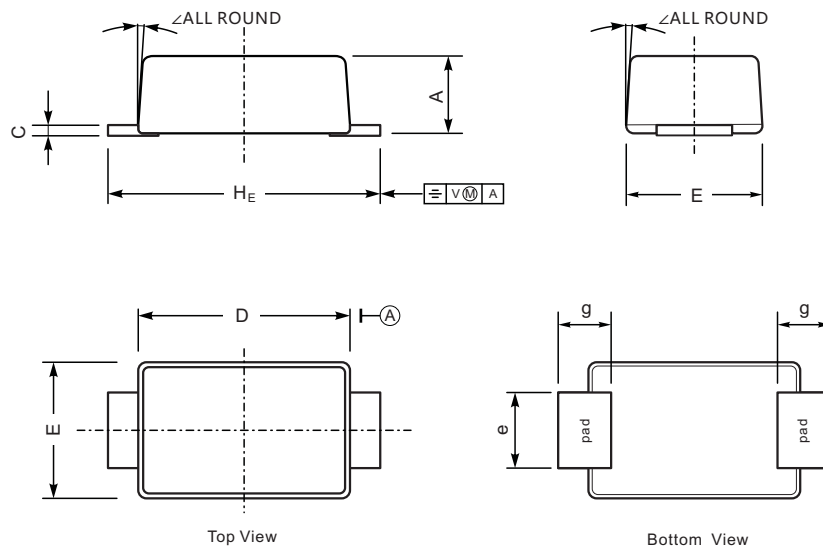
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■ Typical Characteristics



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■ SOD-123FL



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	