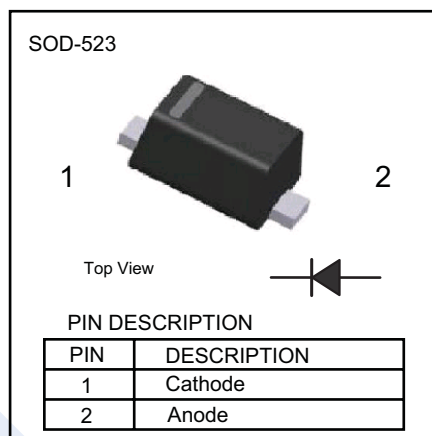


Switching Diodes

1N4148S

■ Features

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

■ 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	mA
Average Rectified Output Current	I_o	150	
Forward Continuous Current	I_{FM}	300	
Peak Forward Surge Current @ $t=1\mu\text{s}$	I_{FSM}	2	
@ $t=1\text{s}$		1	
Power Dissipation	P_d	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
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

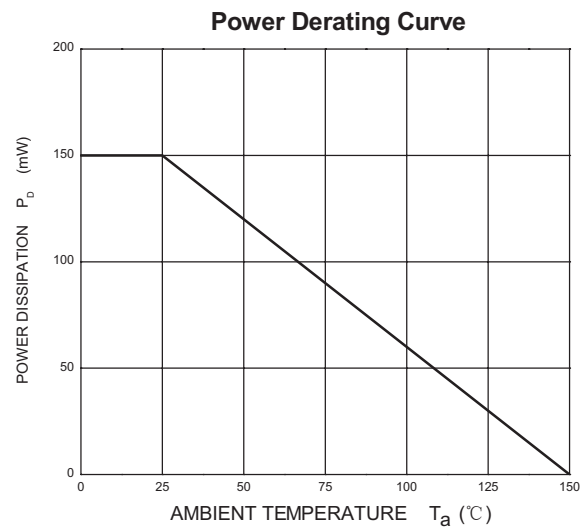
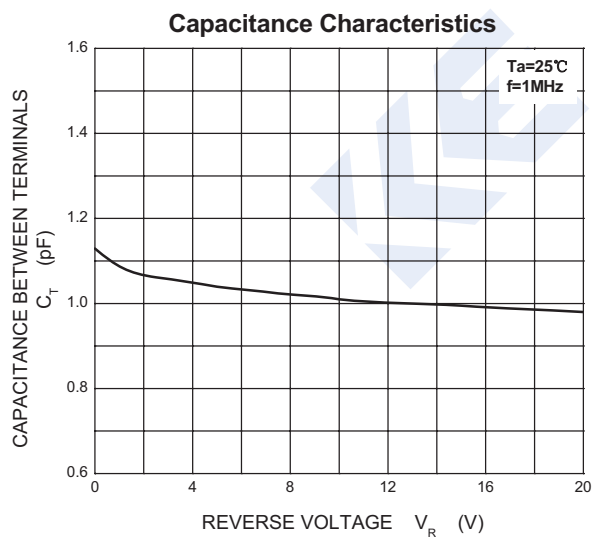
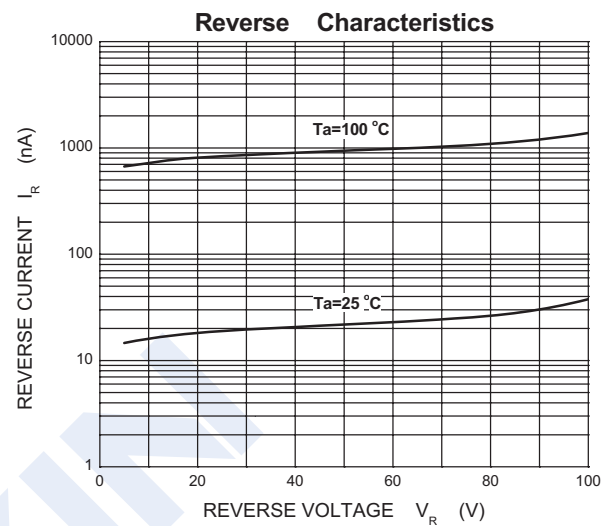
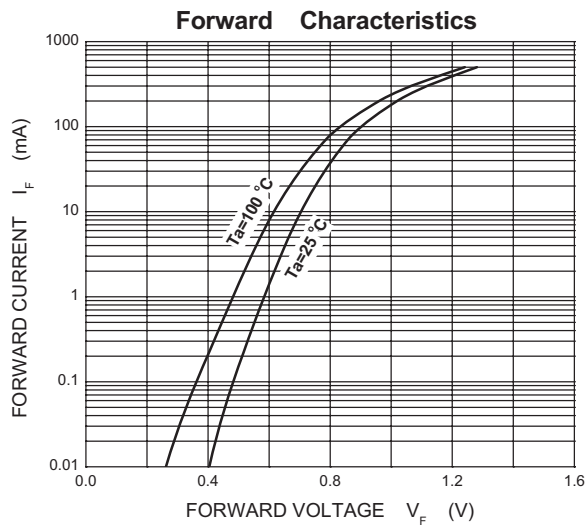
■ Marking

Marking	A
---------	---

Switching Diodes

1N4148S

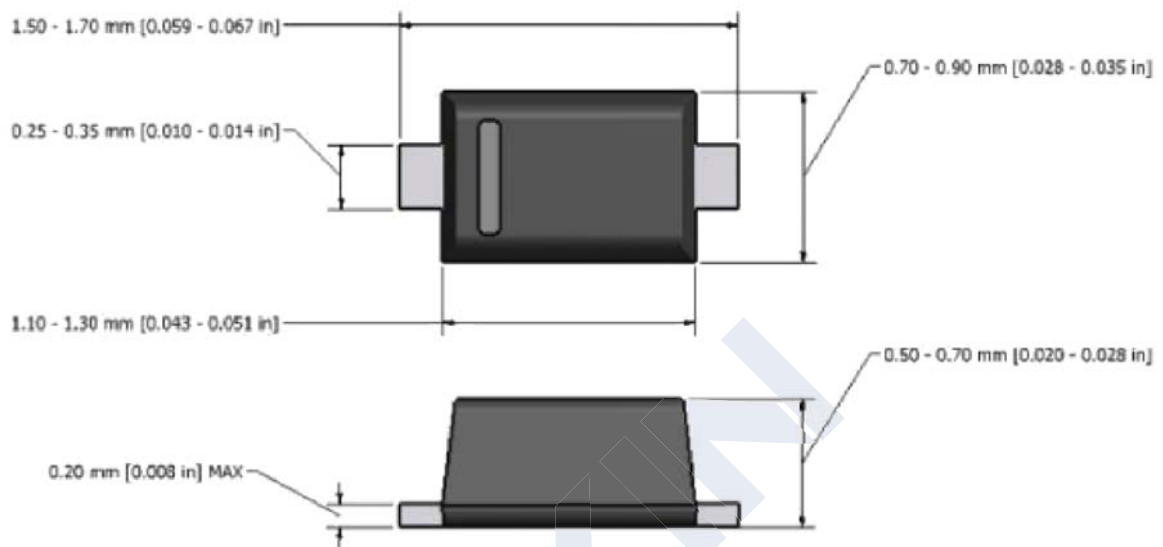
■ Typical Characteristics



Switching Diodes

1N4148S

■ Package Outline Dimensions (SOD-523)



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

■ The Recommended Mounting Pad Size

