



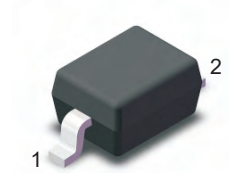
1N4448WS

Silicon Epitaxial Planar Switching Diode

Features

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

SOD-323



1.Cathode —|<— 2.Anode

Marking Code: T5

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

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Reverse Voltage	V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Non-repetitive Peak Forward Surge Current at $t = 8.3\text{ ms}$	I_{FSM}	2	A
Maximum Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$



1N4448WS

Silicon Epitaxial Planar Switching Diode

Characteristics at $T_A = 25\text{ }^\circ\text{C}$

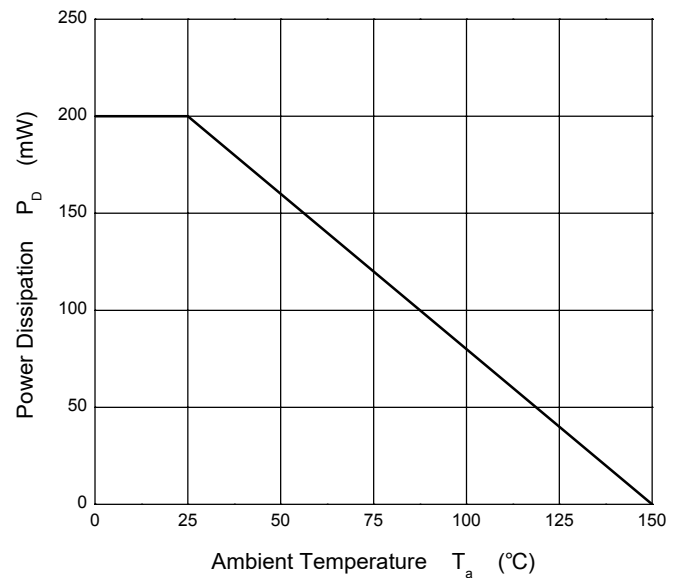
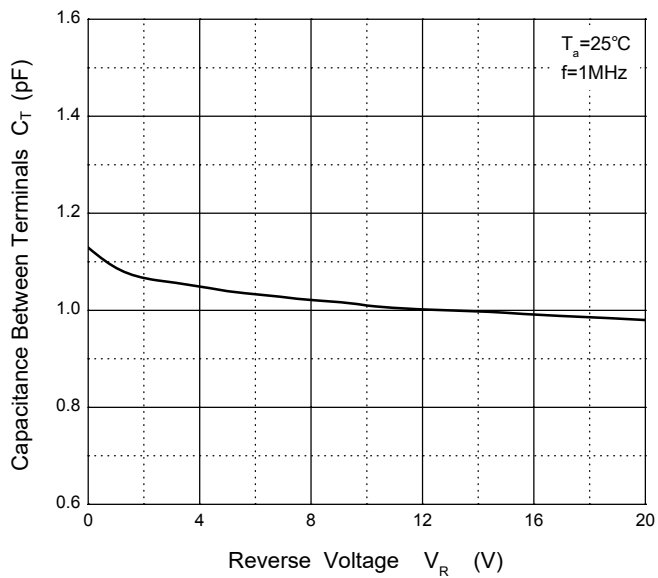
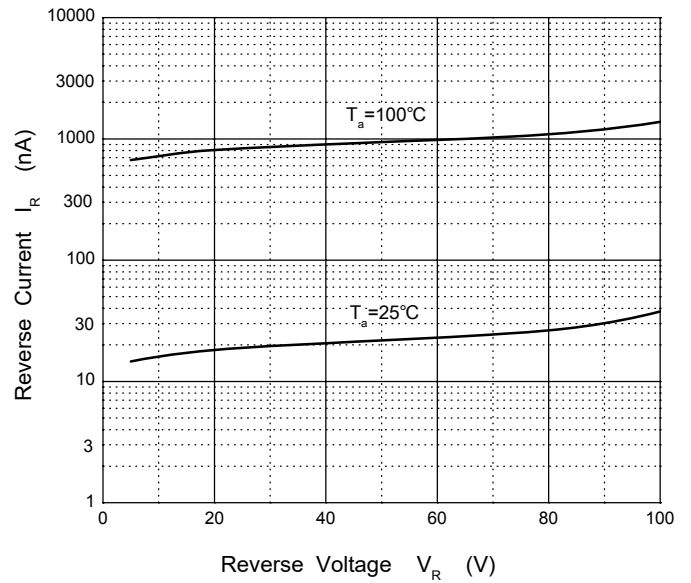
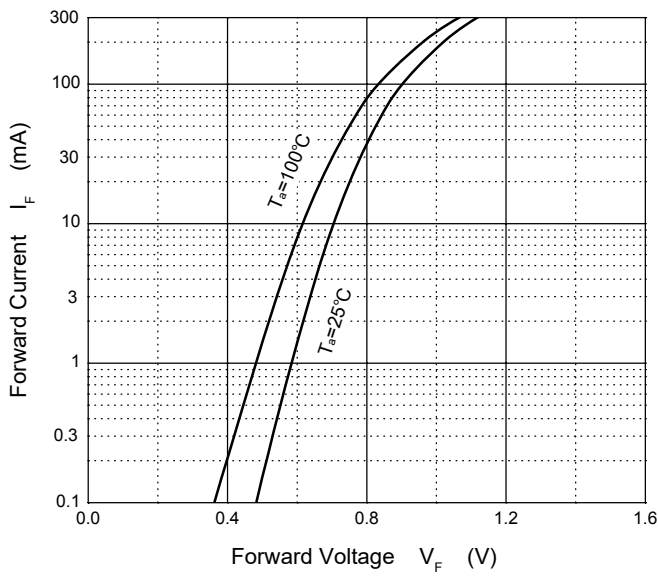
Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	75	--	--	V
Maximum Forward Voltage at $I_F = 5\text{ mA}$	V_F	0.62	--	0.72	V
at $I_F = 10\text{ mA}$		--	--	0.855	
at $I_F = 100\text{ mA}$		--	--	1.00	
at $I_F = 150\text{ mA}$		--	--	1.25	
Peak Reverse Current at $V_R = 20\text{ V}$	I_R	--	--	25	nA
at $V_R = 75\text{ V}$		--	--	2.5	μA
Capacitance Between Terminals at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	--	--	4	pF
Reverse Recovery Time at $I_{rr} = 1\text{ mA}$, $I_F = I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	--	4	--	nS



1N4448WS

Silicon Epitaxial Planar Switching Diode

Typical Characteristic Curves





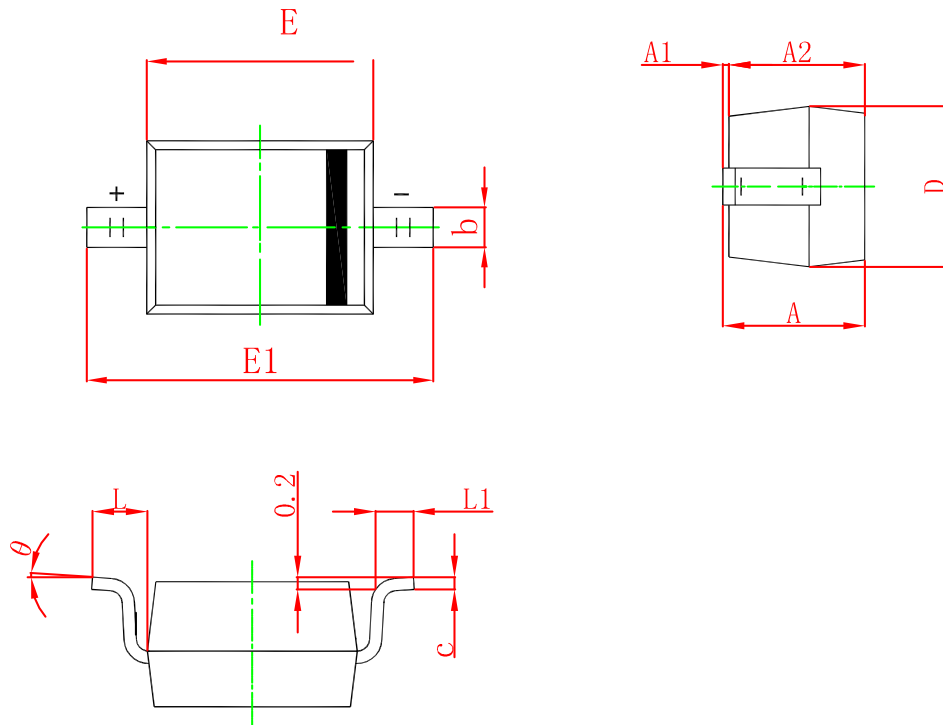
1N4448WS

Silicon Epitaxial Planar Switching Diode

Package Outline

SOD-323

Dimensions in mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°