

Features

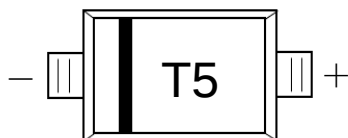
- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion



SOD-323 top view



Schematic diagram



Marking and pin assignment



Halogen-Free

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_R	Reverse Voltage	75	V
V_{RRM}	Peak Repetitive Reverse Voltage		
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	250	mA
I_{FM}	Forward Continuous Current	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2.0	A
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

Electrical Ratings @Ta=25°C

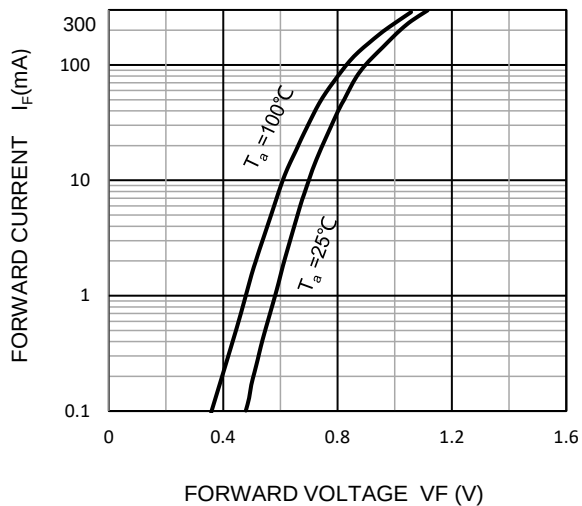
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=10\mu A$	75	--	--	V
I_{R1}	Reverse current	$V_R=75V$	--	--	2.5	μA
I_{R2}		$V_R=20V$	--	--	25	nA
V_{F1}	Forward voltage	$I_F=5mA$	0.62	--	0.72	V
V_{F2}		$I_F=10mA$	--	--	0.855	V
V_{F3}		$I_F=100mA$	--	--	1	V
V_{F4}		$I_F=150mA$	--	--	1.25	V
C_{tot}	Capacitance Between Terminals	$V_R=0V, f=1MHz$	--	--	4	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$	--	--	4	ns

Ordering Information (Example)

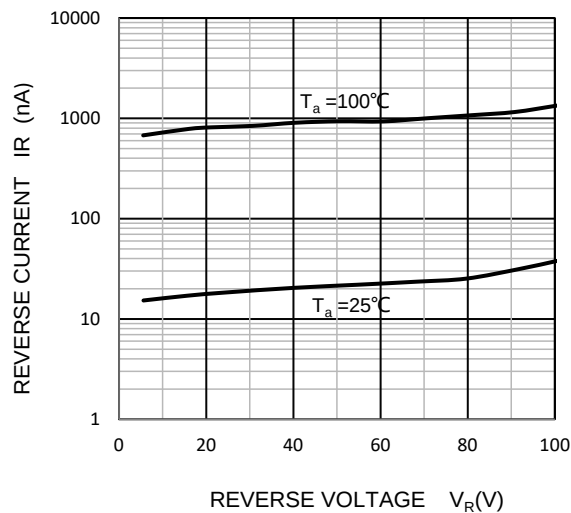
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
1N4448WS	SOD-323	T5	3,000	45,000	180,000	7"reel

Typical Characteristics

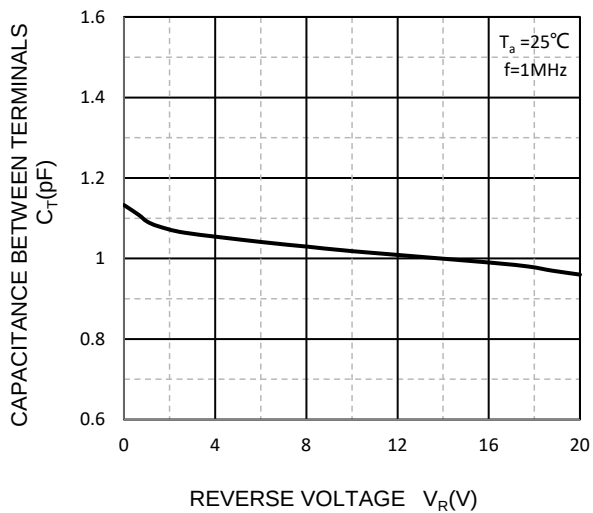
Forward Characteristics



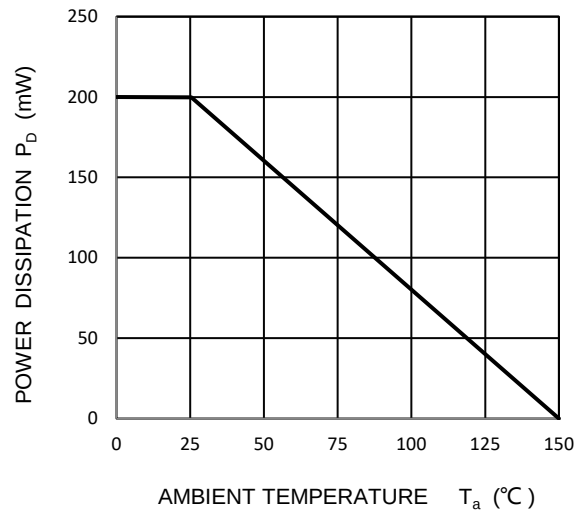
Reverse Characteristics



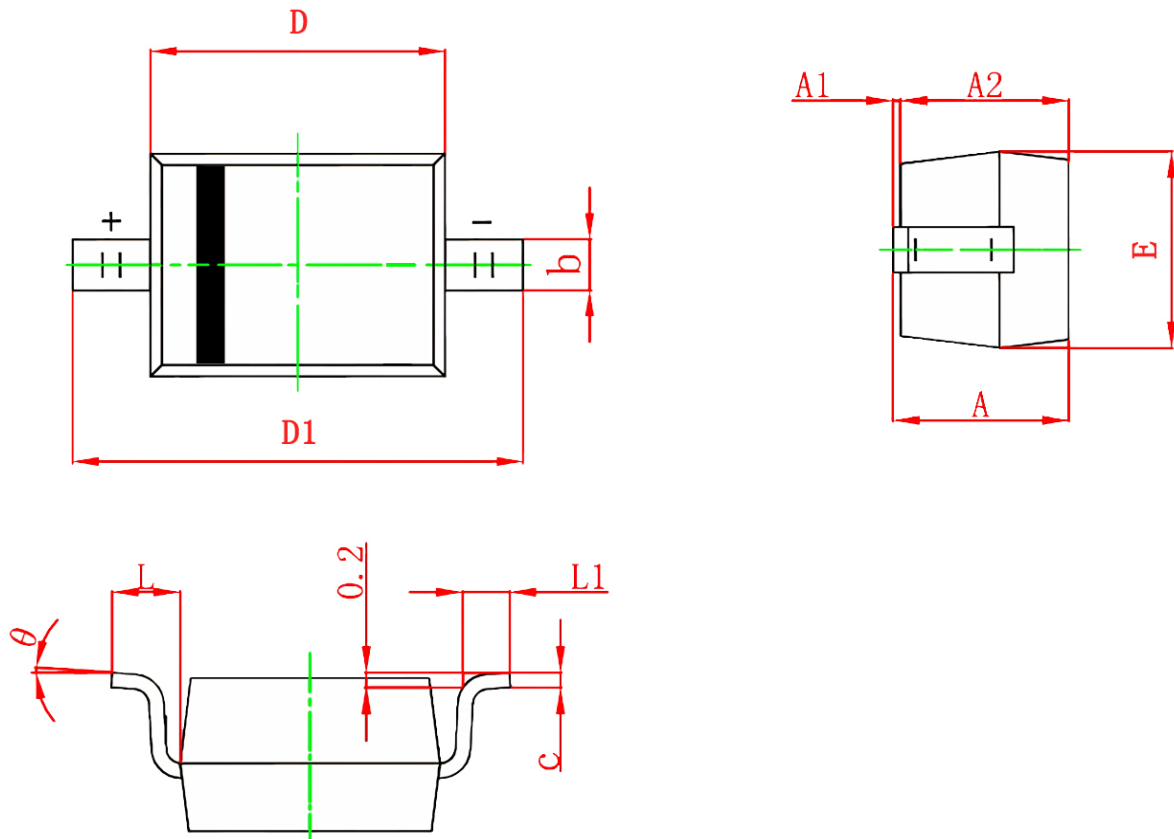
Capacitance Characteristics



Power Derating Curve



SOD-323 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	-	1.100	-	0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.600	1.800	0.063	0.071
D1	2.500	2.750	0.098	0.108
E	1.200	1.400	0.047	0.055
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°