

### Features

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automated Insertion
- Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device

SOD-323W



1.Cathode  2.Anode

Marking Code : L9

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

Parameter	Symbols	Value	Units
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	30	V
DC Blocking Voltage	$V_R$	21	V
Average Rectified Output Current	$I_O$	0.1	A
Forward Continuous Current	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	300	mA
Non-Repetitive Peak Forward Surge Current at $t = 8.3\text{ms}$	$I_{FSM}$	0.6	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance, Junction to Ambient <sup>Note1</sup>	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

Note:1. Part mounted on FR-4 board with recommended pad layout.

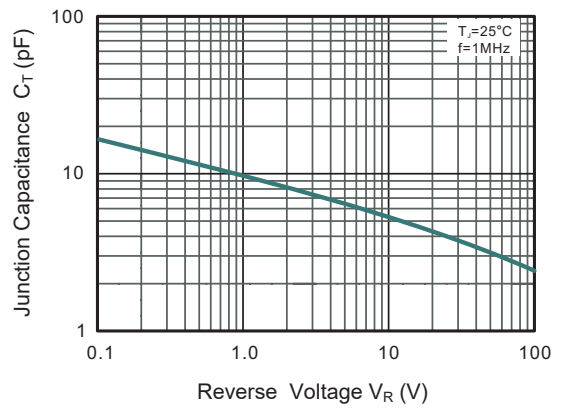
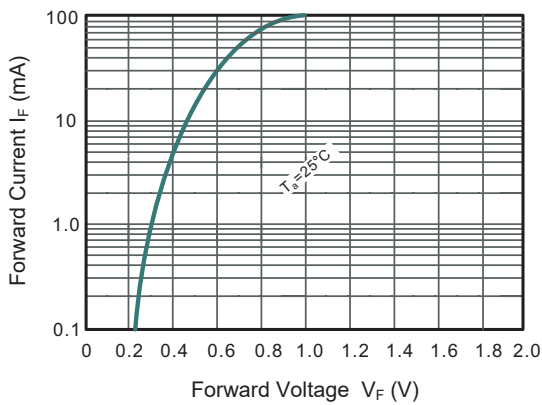
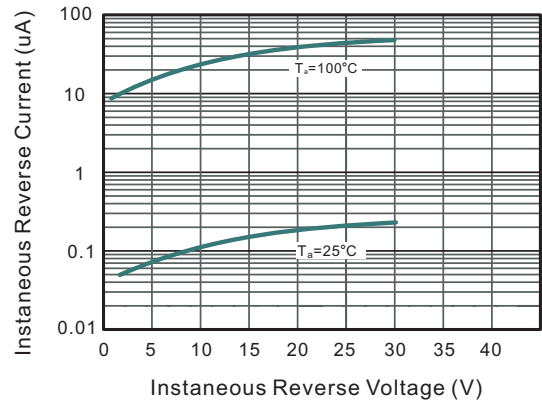
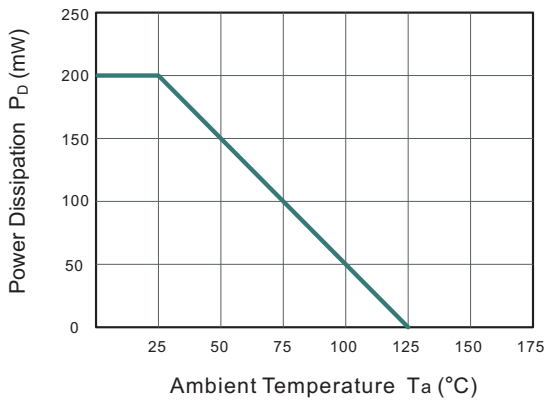


### Characteristics at $T_A = 25\text{ }^\circ\text{C}$

Parameter	Symbols	Min.	Max.	Units
Reverse Breakdown Voltage	$V_{(BR)R}$	30	--	V
Forward Voltage at $I_F=0.1\text{ mA}$ at $I_F=1.0\text{ mA}$ at $I_F=10\text{ mA}$ at $I_F=30\text{ mA}$ at $I_F=100\text{ mA}$	$V_F$	-- -- -- -- --	0.24 0.32 0.40 0.50 1.00	V
Peak Reverse Current at $V_R=25\text{ V}$ , $T_J=25\text{ }^\circ\text{C}$	$I_R$	--	2.0	$\mu\text{A}$
Typical Junction Capacitance at $V_R=1\text{ V}$ , $f=1\text{ MHz}$	$C_T$	--	10	pF
Reverse Recovery Time at $I_F=I_R=10\text{ mA}$ , $I_{rr}=0.1 \times I_R$ , $R_L=100\Omega$	$t_{rr}$	--	5	$^\circ\text{C}$



### Typical Characteristic Curves





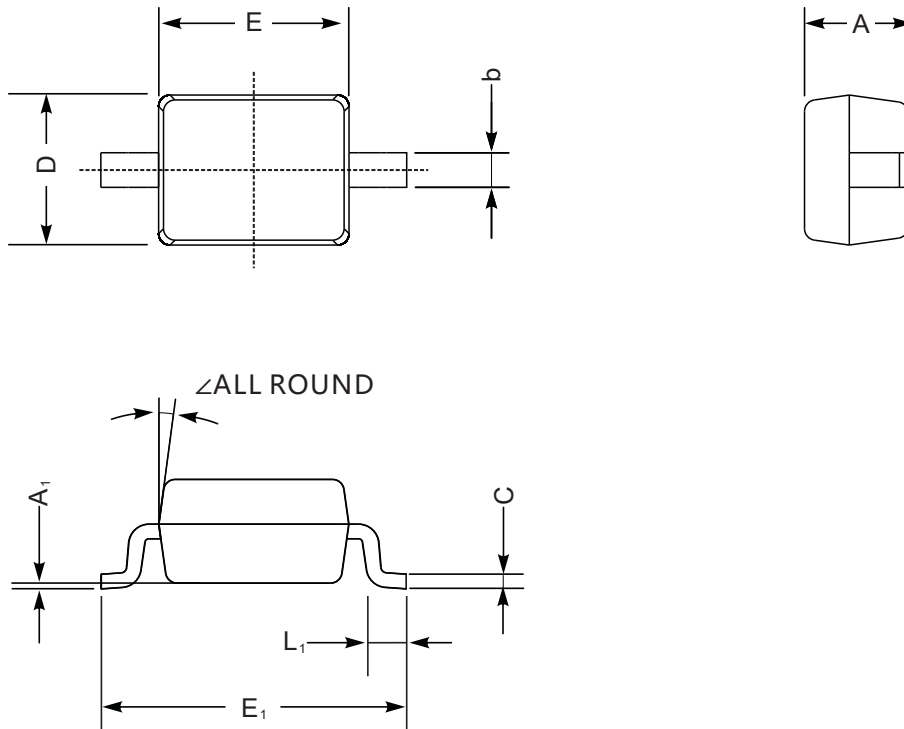
# BAT54WB

## Schottky Barrier Diodes

### Package Outline

SOD-323W

Dimensions in mm



UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	