BAT54WS

30V-0.1A Schottky Barrier Diode

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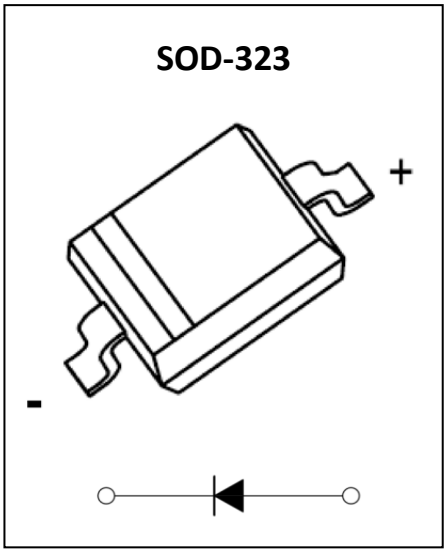


Feature

- Extremely Fast Switch Speed
- Low Forward Voltage

MARKING:

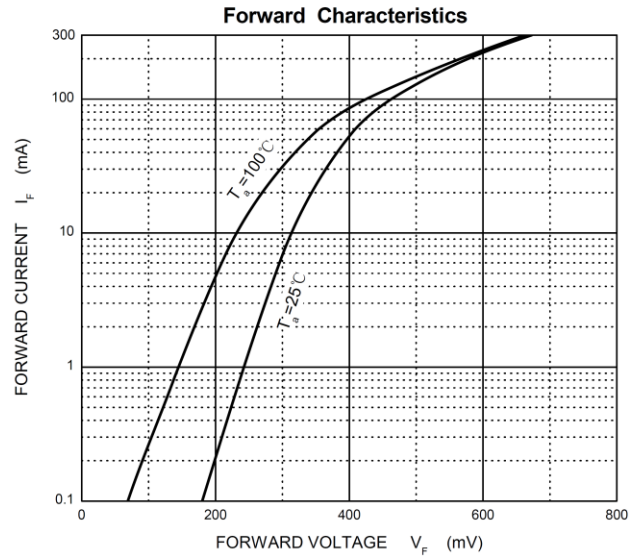
ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

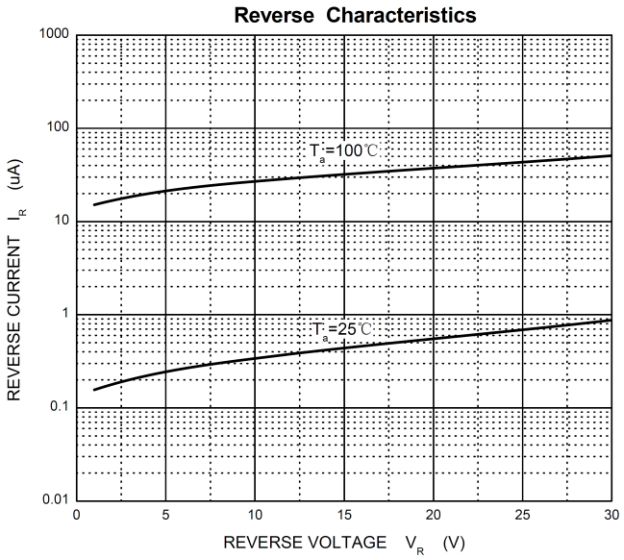
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	30	V
Mean rectifying current	I_O	0.1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	0.6	A
Power Dissipation	P_D	0.15	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature Range	T_{STG}	-55 ~ +150	℃

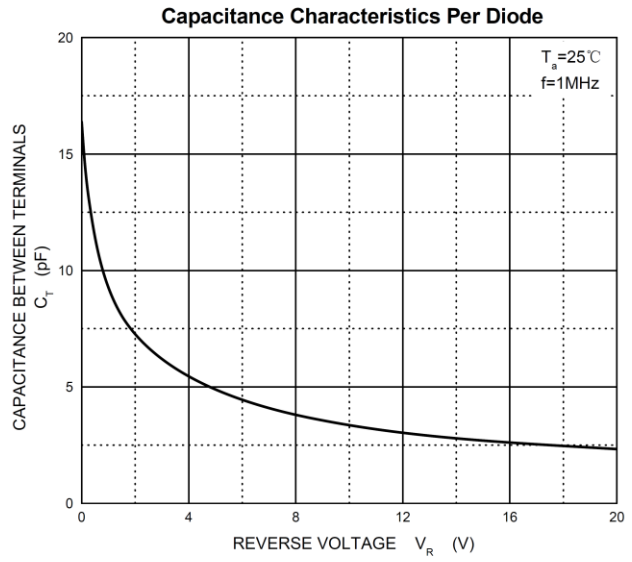
ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

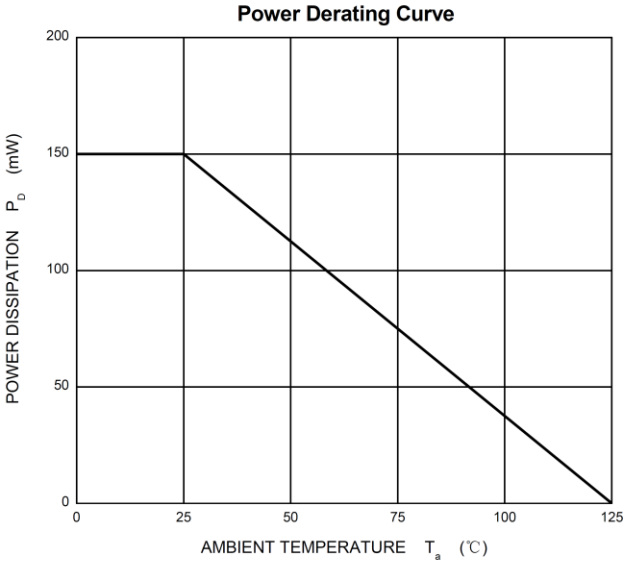
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=100μA	30			V
Forward voltage	V_{F1}	I_F =0.1mA			0.24	V
	V_{F2}	I_F =1mA			0.32	V
	V_{F3}	I_F =10mA			0.40	V
	V_{F4}	I_F =30mA			0.50	V
	V_{F5}	I_F =100mA			1	V
Reverse current	I_R	V_R =25V			2	μA
Reverse recovery time	t_{rr}	I_F=10mA, I_R=10mA to 1mA , R_L=100Ω			5	ns
Capacitance between terminals	C_T	V_R=1V,f=1MHz			10	pF

Typical Characteristics

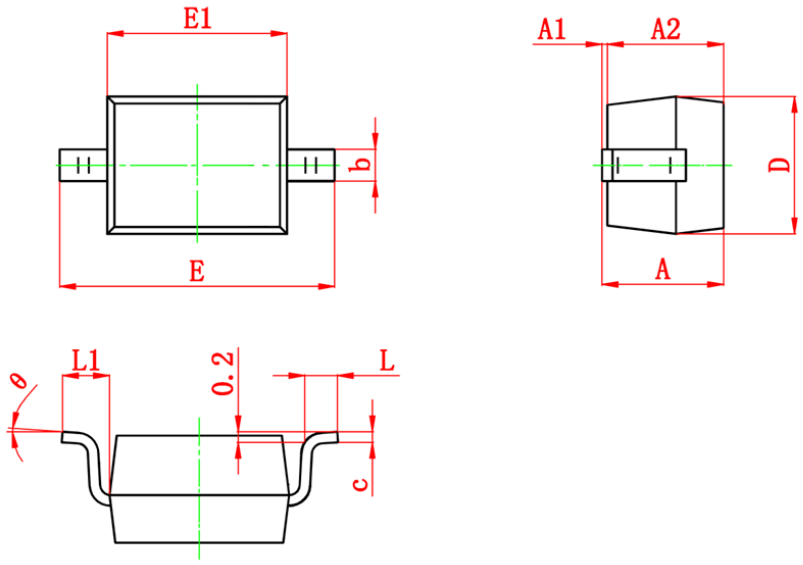








SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.150MAX		0.045MAX	
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.400	0.010	0.016
c	0.080	0.180	0.003	0.007
D	1.200	1.400	0.047	0.055
E	2.500	2.800	0.098	0.110
E1	1.600	1.800	0.063	0.071
L	0.200	0.450	0.008	0.018
L1	0.475REF		0.019REF	
θ	0°	8°	0°	8°