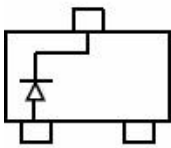
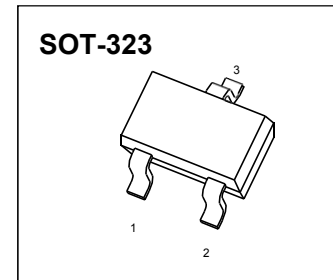
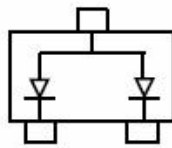


FEATURES

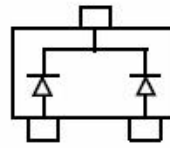
- Extremely Fast Switching Speed



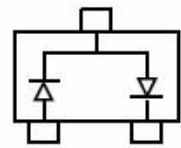
BAT54W



BAT54AW



BAT54CW



BAT54SW

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

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
	V_R		
Forward Continuous Current	I_{FM}	200	mA
Power Dissipation	P_D	200	mW
Storage temperature	T_{STG}	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	30			V	$I_R=100\mu\text{A}$
Forward voltage	V_{F1}			0.24	V	$I_F=0.1\text{mA}$
	V_{F2}			0.32	V	$I_F=1\text{mA}$
	V_{F3}			0.40	V	$I_F=10\text{mA}$
	V_{F4}			0.50	V	$I_F=30\text{mA}$
	V_{F5}			1	V	$I_F=100\text{mA}$
Reverse current	I_R			2	μA	$V_R=25\text{V}$
Diode Capacitance	C_D			10	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			5	nS	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

Typical Characteristics

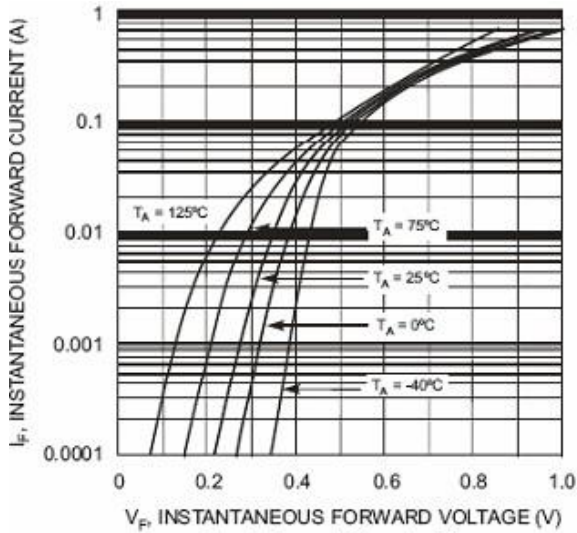


Fig. 1 Forward Characteristics

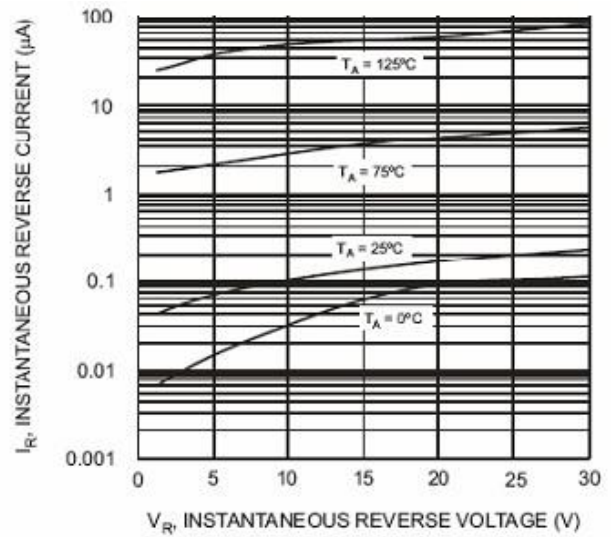


Fig. 2 Typical Reverse Characteristics

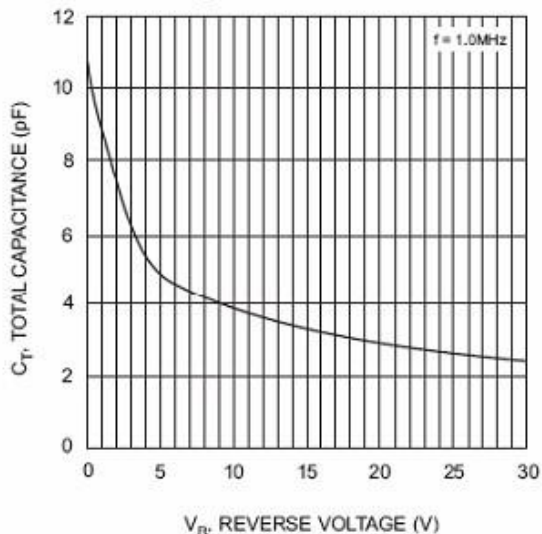


Fig. 3 Typical Capacitance vs. Reverse Voltage

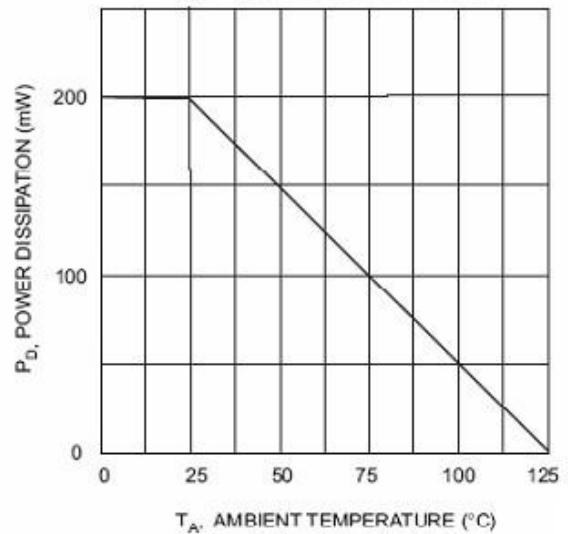
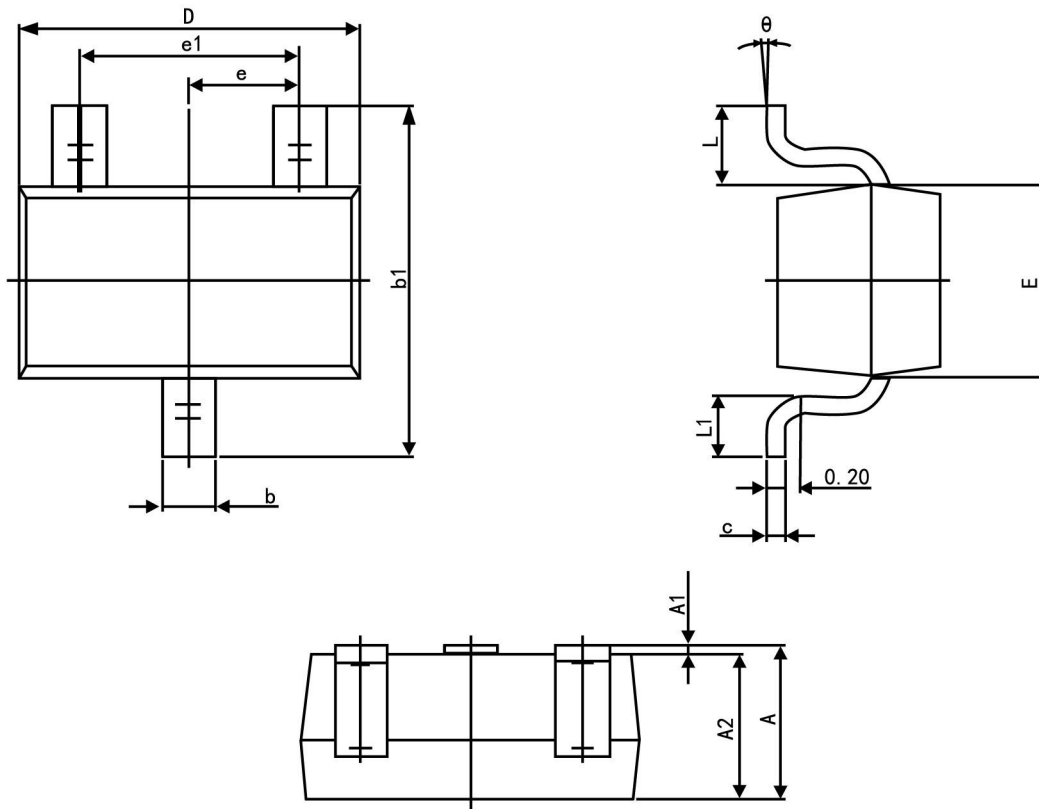


Fig. 4 Power Derating Curve

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.200	0.400
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
theta	0°	8°