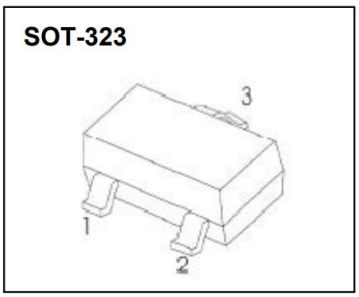
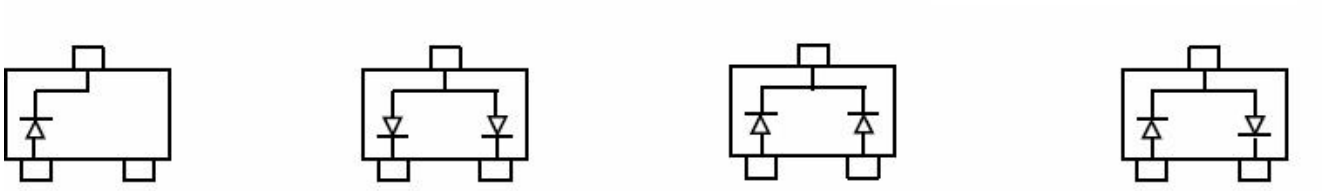
FEATURES

Extremely Fast Switching Speed





BAT54W MARKING: KL5 **BAT54AW MARKING**: KL6 **BAT54CW MARKING**: KL7 **BAT54SW MARKING**: KL8

Maximum Ratings @T_A=25℃

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

Electrical Characteristics @T_A=25℃

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

Typical Characteristics

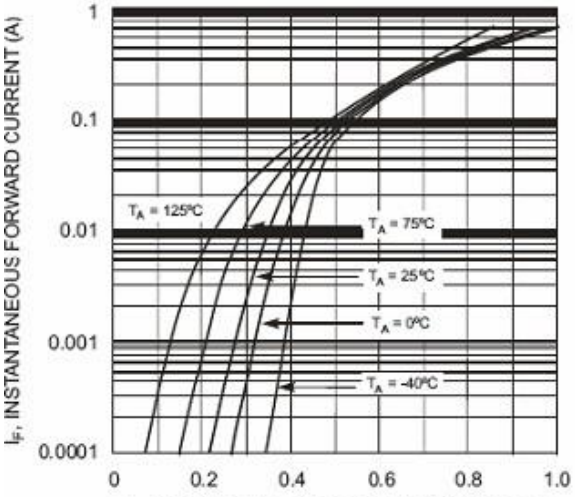


Fig. 1 Forward Characteristics

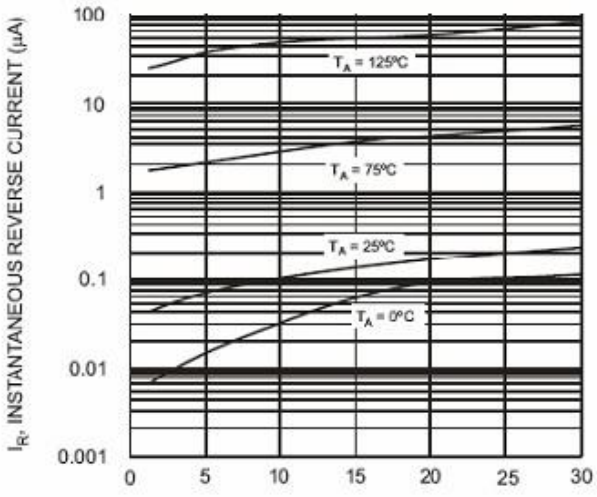


Fig. 2 Typical Reverse Characteristics

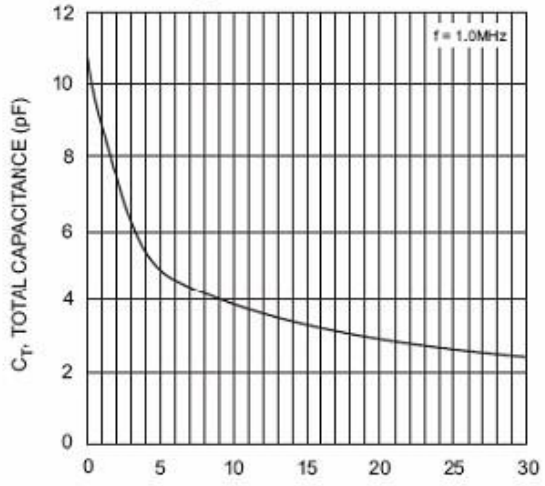


Fig. 3 Typical Capacitance vs. Reverse Voltage

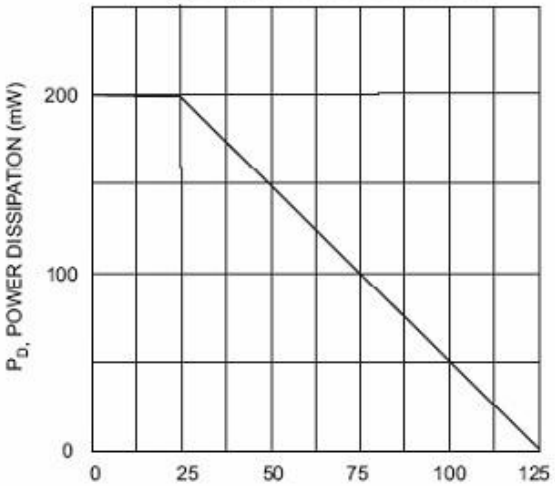
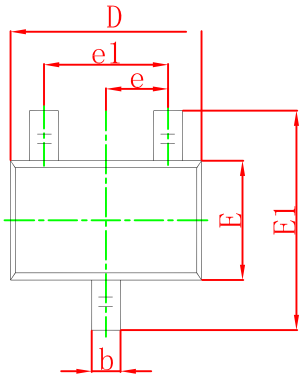
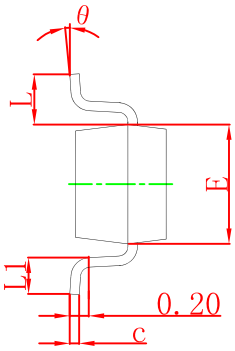
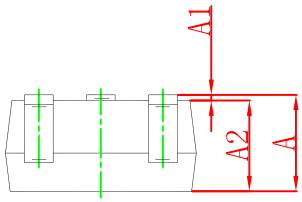


Fig. 4 Power Derating Curve

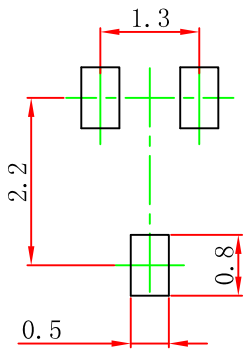






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-323 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.