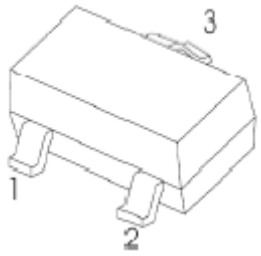
SOT- 23 Plastic-Encapsulate Diodes

FEATURES

- Extremely Fast Switching Speed

SOT-23



MARKING:



TKBAT54	TKBAT54A	TKBAT54C	TKBAT54S
KL1	KL2	KL3	KL4

Solid dot = Green molding compound device,if none, the normal device.

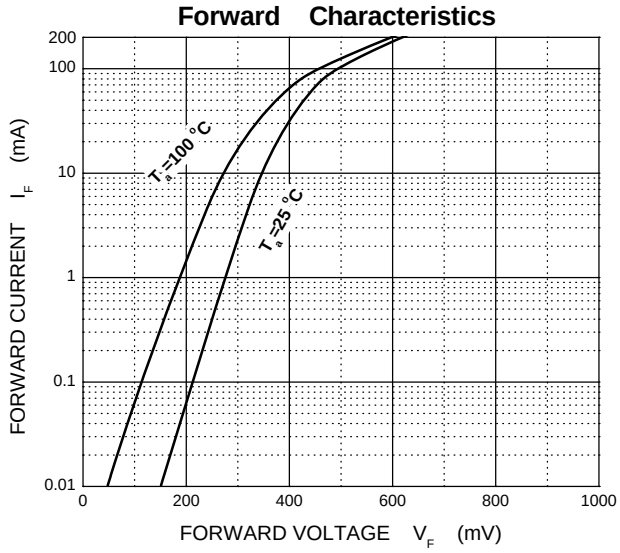
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

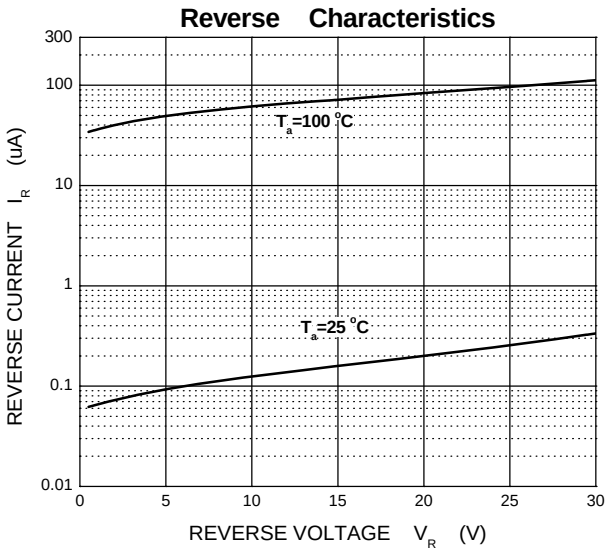
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	600	mA
Repetitive Peak Forward Current @ t≤1s, δ ≤0.5	I_{FRM}	300	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\Theta JA}$	500	℃/W
Junction Temperature	T_j	125	℃
Storage Temperature	T_{stg}	-55~+150	℃

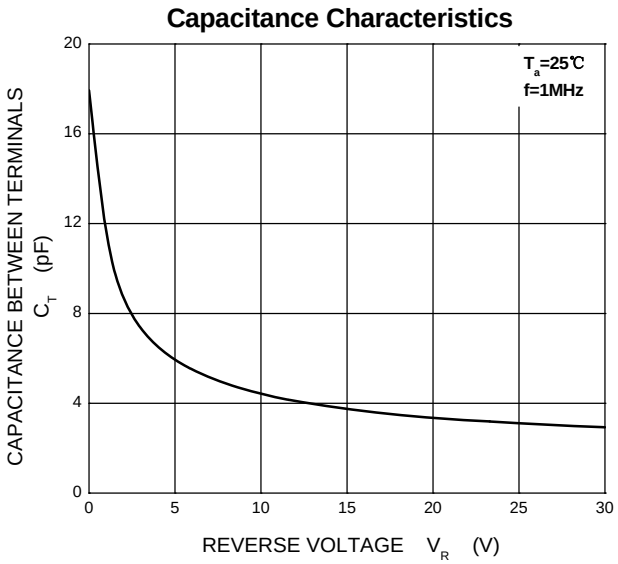
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

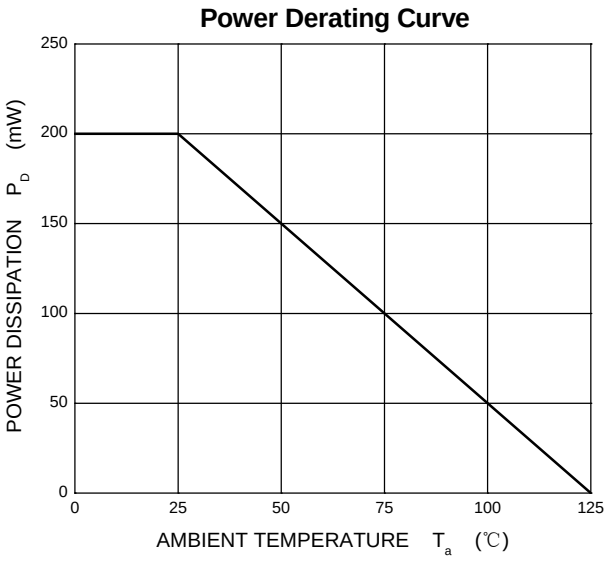
Parameter	Symbol	Min	Typ	Max	Unit	Test conditions
Reverse voltage	$V_{(BR)}$	30			V	I_R=100μA
Forward voltage	V_F			0.24	V	I_{F1}=0.1mA
				0.32	V	I_{F2}=1mA
				0.40	V	I_{F3}=10mA
				0.50	V	I_{F4}=30mA
				1	V	I_{F5}=100mA
Reverse current	I_R			2	μA	V_R=25V
Diode capacitance	C_D			10	pF	V_R=1V,f=1MHz
Reverse recovery time	t_{rr}			5	ns	I_F=I_R=10mA Irr=0.1×I_R,R_L=100Ω

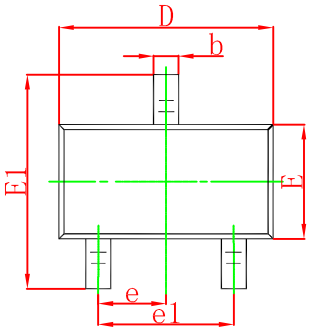
Typical Characteristics

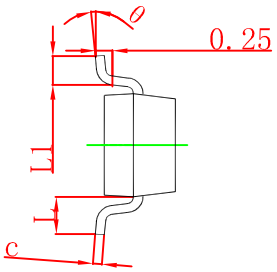


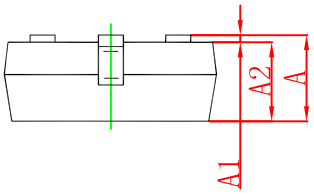






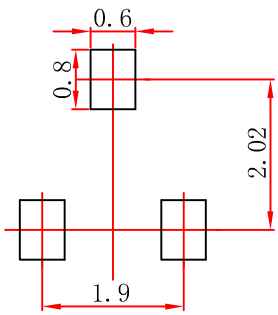






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



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