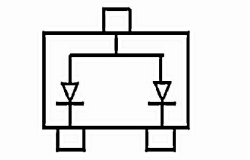
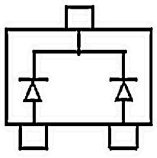
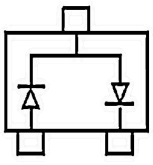
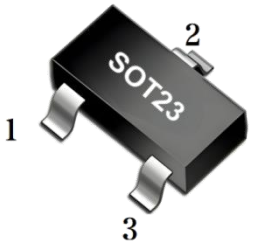
■ FEATURES

* Extremely Fast Switching Speed


BAT54A MARKING: KL2

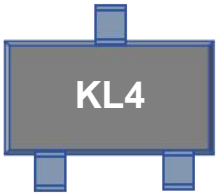

BAT54C MARKING: KL3


BAT54S MARKING: KL4



■ MARKING

EXAMPLE: Marking: KL4



BAT54A	KL2
BAT54C	KL3
BAT54S	KL4

■ ABSOLUTE MAXIMUM RATINGS(TA=25°C, unless otherwise specified.)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	30	V
V_{RWM}	Working Peak Reverse Voltage	30	V
V_R	DC Blocking Voltage	30	V
I_{FM}	Forward Continuous Current	0.2	A
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	0.6	A
I_{FRM}	Repetitive Peak Forward Current @ t≤1s, δ ≤0.5	0.3	A
P_D	Power Dissipation	0.2	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55~150	°C
$R_{\theta JA}$	Thermal Resistance fromJunction to Ambient	500	°C/W

Notes: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

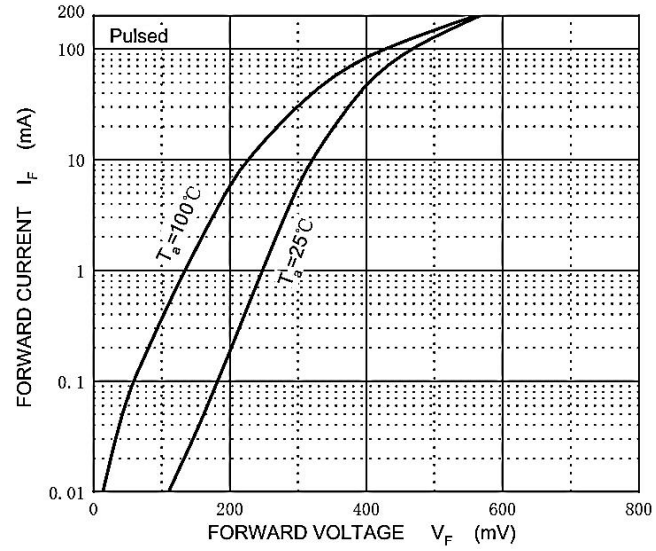
■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse voltage	V(BR)	IR=100μA	30			V
Reverse current	IR	VR=25V			2	μA
Diode capacitance	C_D	VR=1V,f=1MHz			10	pF
Reverse recovery time	trr	IF=IR=10mA,Irr=0.1×IR,RL=100Ω			5	ns

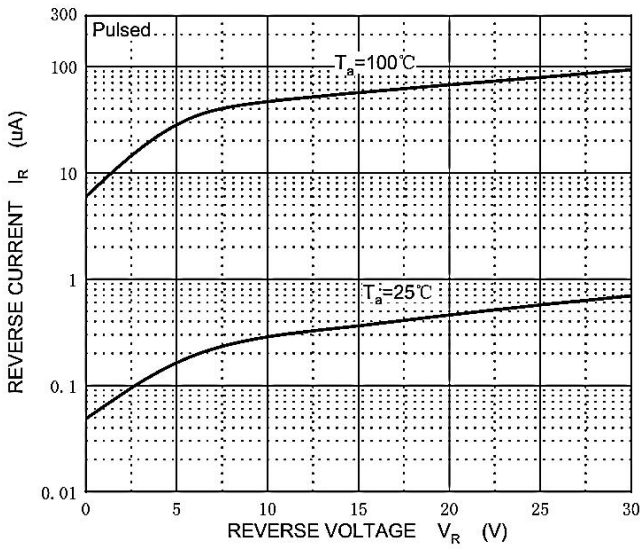
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward voltage	VF1	IF1=0.1mA			0.24	V
		IF2=1mA			0.32	V
		IF3=10mA			0.40	V
		IF4=30mA			0.50	V
		IF5=100mA			1	V

■ Typical Characteristics

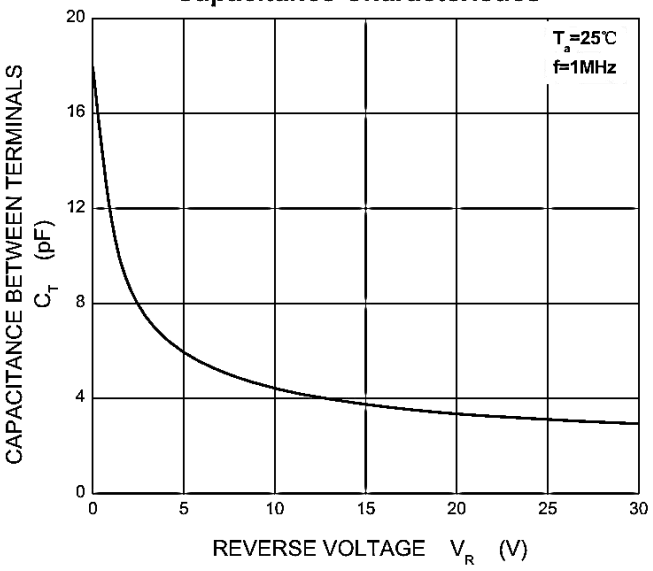
Forward Characteristics



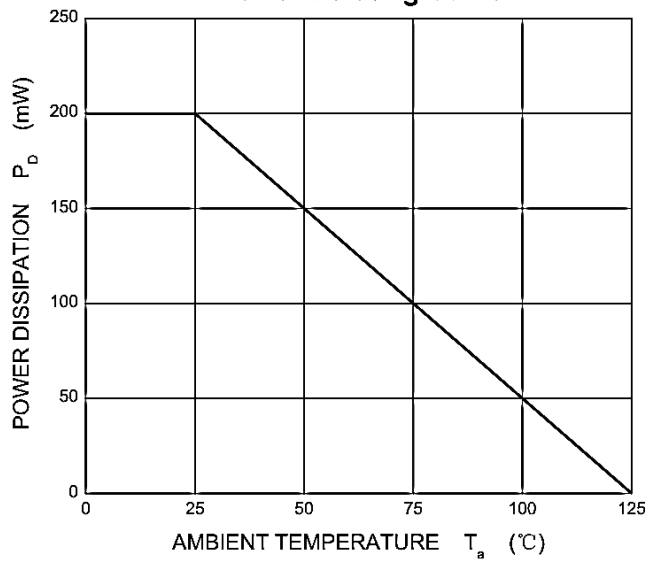
Reverse Characteristics



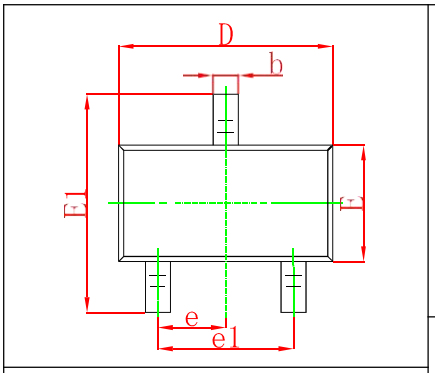
Capacitance Characteristics

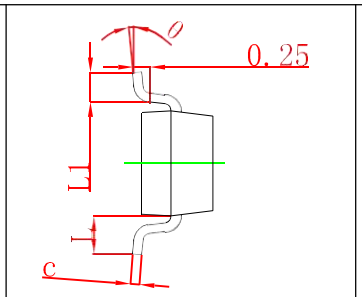


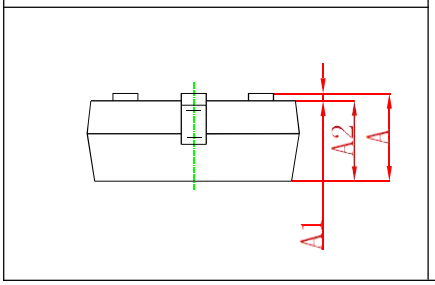
Power Derating Curve

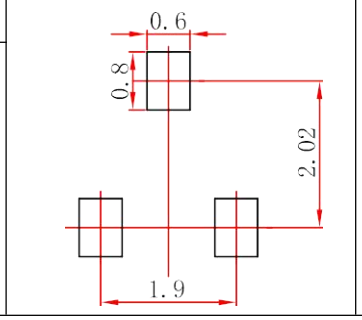


■ SOT23 PACKAGE OUTLINE DIMENSIONS









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°

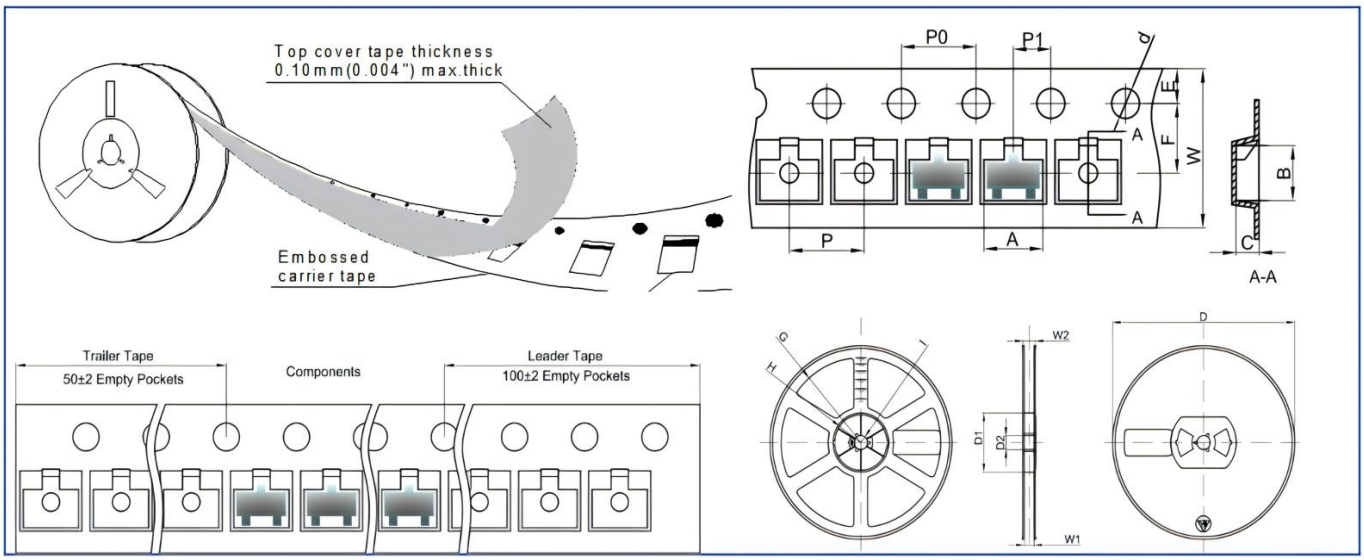
Note:

1.Controlling dimension:in millimeters.

2.General tolerance:±0.05mm.

3.The pad layout is for reference purposes only.

■ REEL PACKING



Dimensions are in millimeter										
PKG TYPE	A	B	C	d	E	F	Po	P	P1	W
SOT-23	3.15	2.77	1.22	Φ1.50	1.75	3.50	4.00	4.00	2.00	8.00
Reel Optiom	D	D1	D2	G	H	I	W1	W2	Q.TY PER REEL	
7" Dia	Φ178.0	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30	3000PCS	
13"Dia	φ330.0	/	13.00	/	/	R6.50	9.50	12.30	10000PCS	