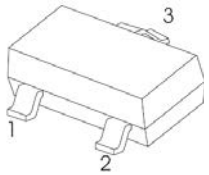
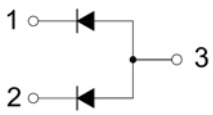
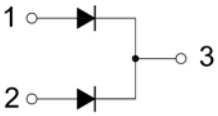
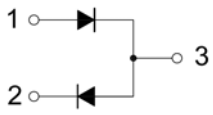
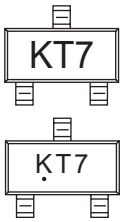
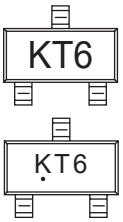
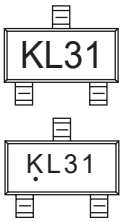
SOT-23 Plastic-Encapsulate Diodes

FEATURES

- Fast Switching Speed
- High Conductance
- For General Purpose Switching Applications

SOT-23



BAV23A	BAV23C	BAV23S
		
MARKING: KT7	**MARKING: KT6**	**MARKING:KL31**
		

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

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

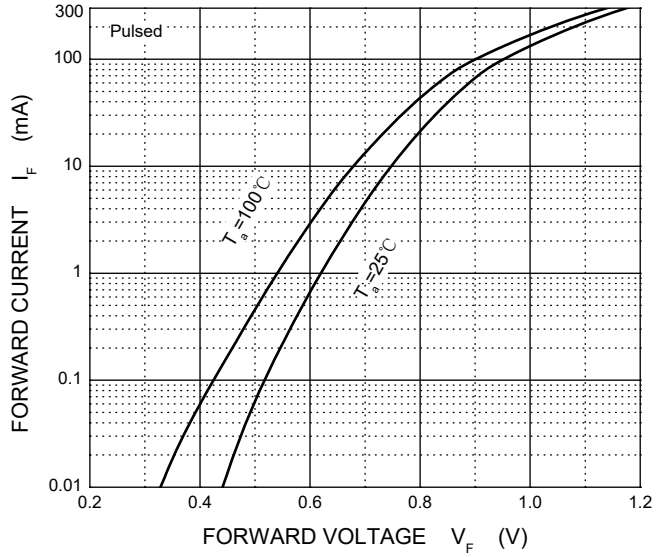
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	250	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	175	V
I_O	Average Rectified Output Current	225	mA
I_{FRM}	Repetitive Peak Forward Surge Current	625	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	1.7	A
P_D	Power Dissipation	350	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	357	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

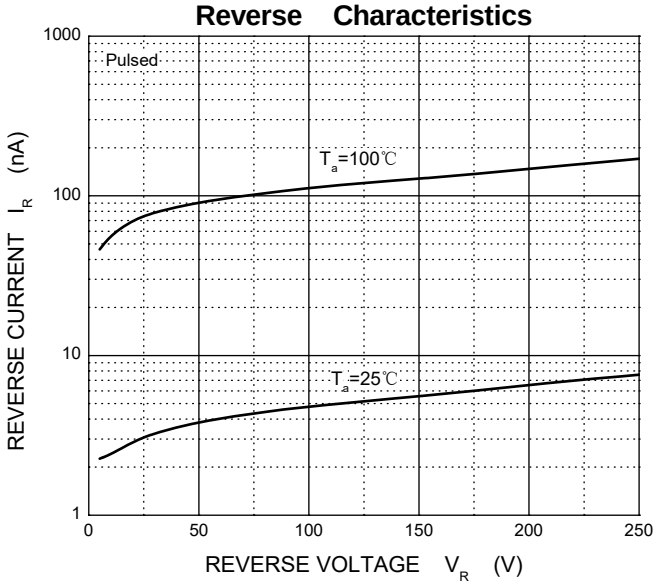
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	250			V
Reverse current	I_R	V_R=250V			0.1	μA
Forward voltage	V_F	I_F=100mA			1	V
		I_F=200mA			1.25	
Total capacitance	C_{tot}	V_R=0V,f=1MHz			5	pF
Reverse recovery time	t_{rr}	I_F= I_R=30mA, I_{rr}=0.1×I_R, R_L=100Ω			50	ns

Typical Characteristics

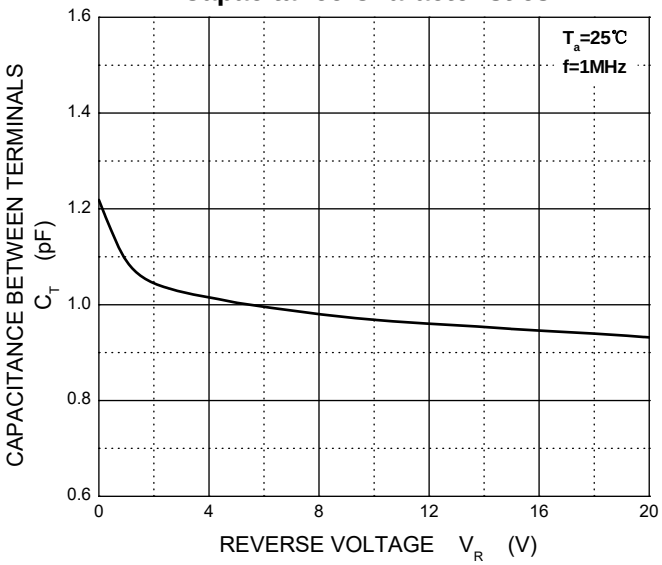
Forward Characteristics



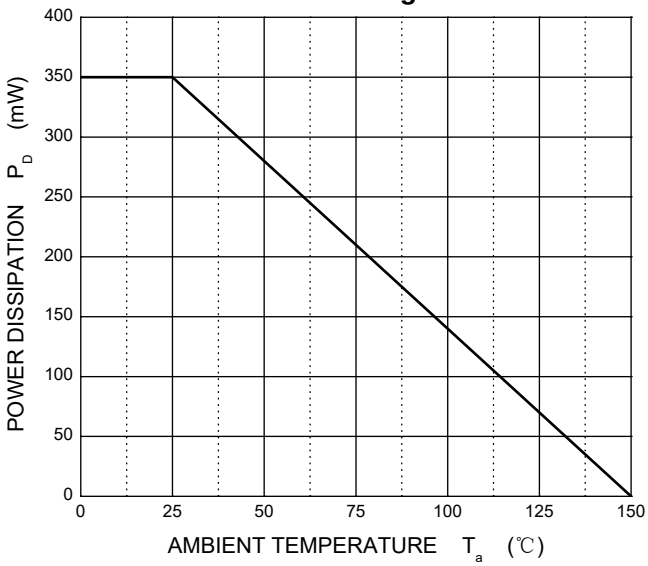
Reverse Characteristics



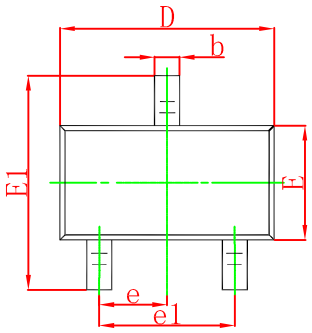
Capacitance Characteristics

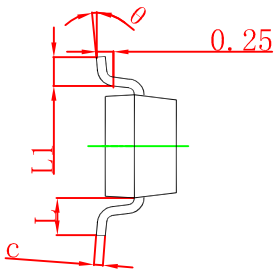


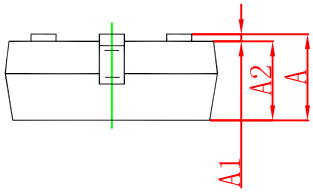
Power Derating Curve



SOT-23 Package Outline Dimensions

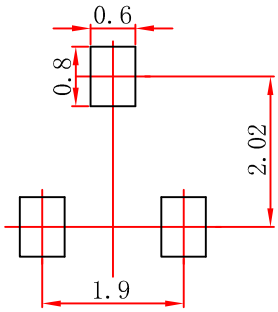






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 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°

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.