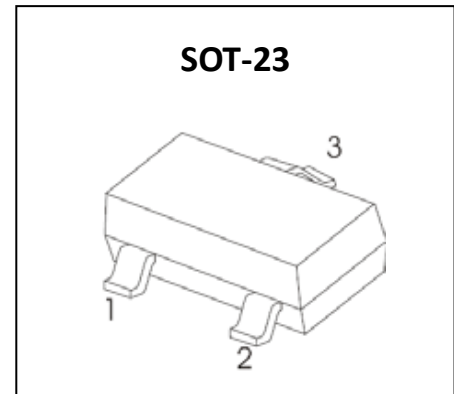


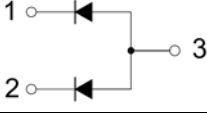
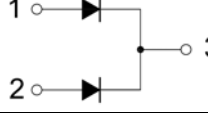
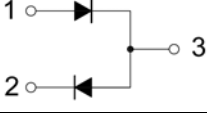
**BAV23A/C/S Fast Switching Diodes**
**Feature**

- Low Reverse Current
- Fast Switching Speed
- For General Purpose Switching Applications

**Application**

- Extreme fast switches


**Marking**

BAV23A	BAV23C	BAV23S
		
<b>MARKING: KT7</b>	<b>MARKING: KT6</b>	<b>MARKING: KL31</b>

**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)**

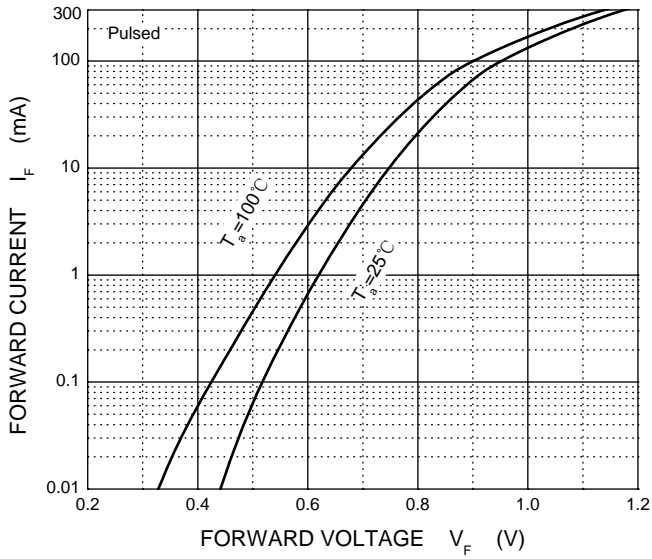
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	175	V
Average rectified output current	$I_O$	0.225	A
Non-repetitive Peak Forward Surge Current @ $t=8.3$ ms	$I_{FSM}$	1.7	A
Power Dissipation	$P_D$	0.35	W
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)**

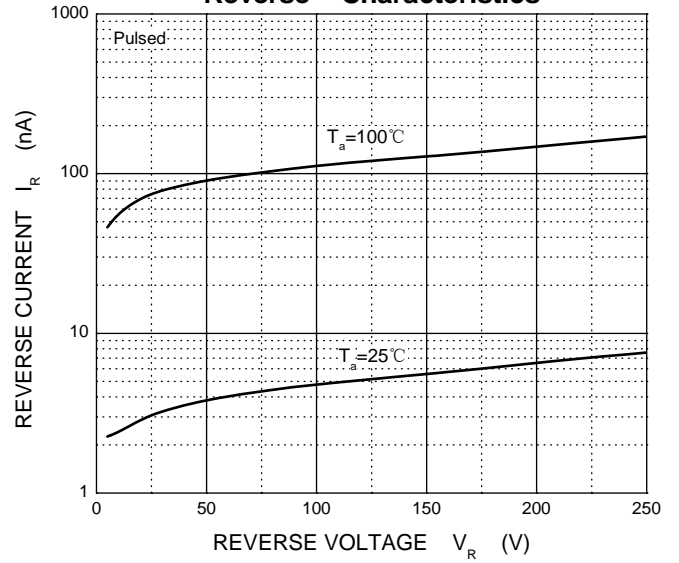
Parameter	Symbol	Test Condition	Min	Max	Unit
Forward voltage	$V_F$	$I_F=100\text{mA}$		1	V
		$I_F=200\text{mA}$		1.25	V
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	250		V
Reverse current	$I_R$	$V_R=250\text{V}$		100	nA
Diode capacitance	$C_D$	$V_R=0\text{V}, f=1\text{MHz}$		5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=30\text{mA}, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$		50	ns

**Typical Electrical and Thermal Characteristics**

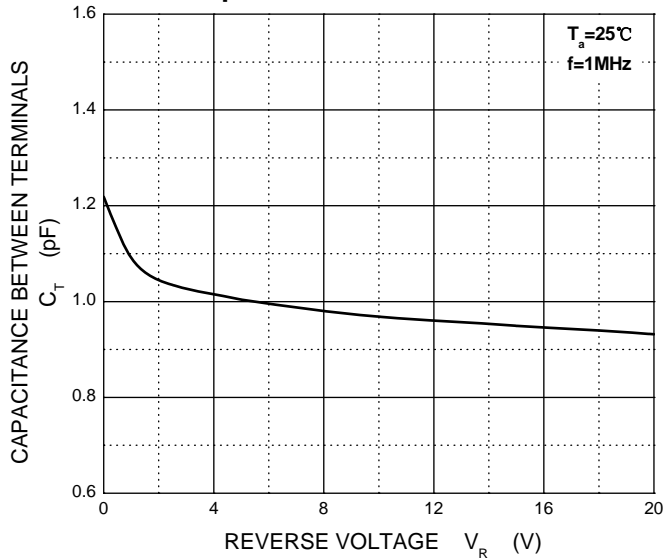
**Forward Characteristics**



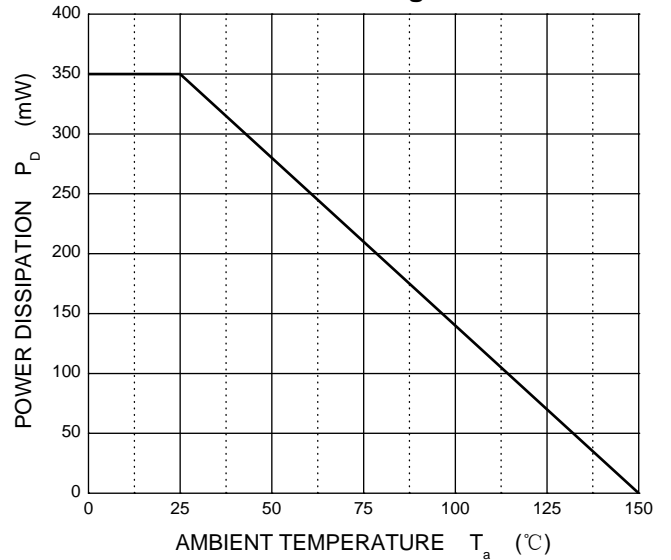
**Reverse Characteristics**



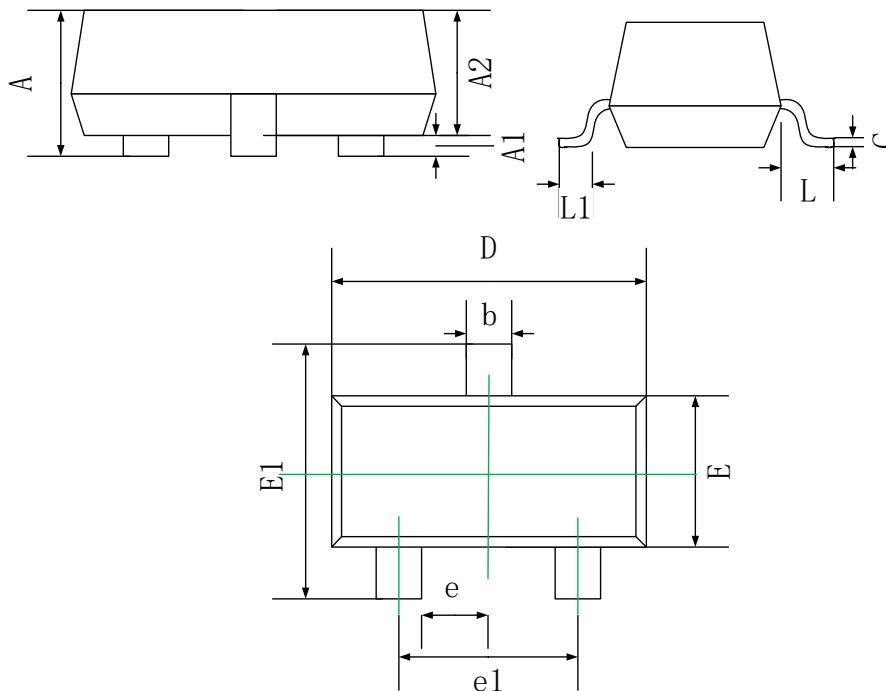
**Capacitance Characteristics**



**Power Derating Curve**

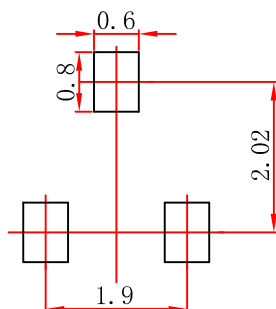


## SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50

## SOT-23 Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.