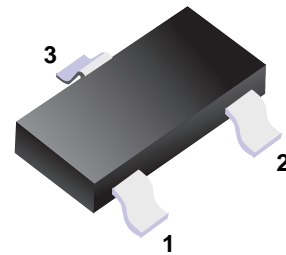


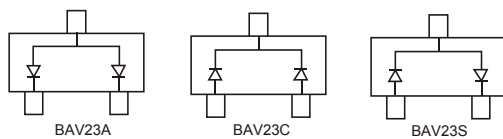
## ■ Switching Diodes

### Features

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



■ Simplified outline(SOT-23)



### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Reverse Voltage	$V_{RRM}$	250	V	
Working Peak Reverse Voltage	$V_{RWM}$	200		
DC Blocking Voltage	$V_R$	200		
RMS Reverse Voltage	$V_{R(RMS)}$	141		
Forward Continuous Current	$I_{FM}$	400	mA	
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	$t=1\mu\text{s}$	9	A
		$t=100\mu\text{s}$	3	
		$t=10\text{ms}$	1.7	
Repetitive Peak Forward Surge Current	$I_{FRM}$	625	mA	
Power Dissipation	$P_d$	350	mW	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$	
Junction Temperature	$T_J$	150	$^\circ\text{C}$	
Storage Temperature range	$T_{stg}$	-65 to 150		

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R = 100\ \mu\text{A}$	250			V
Forward voltage	$V_F$	$I_F = 100\ \text{mA}$			1	
		$I_F = 200\ \text{mA}$			1.25	
Reverse voltage leakage current	$I_R$	$V_R = 200\ \text{V}, T_J = 25^\circ\text{C}$			100	nA
		$V_R = 200\ \text{V}, T_J = 150^\circ\text{C}$			100	$\mu\text{A}$
Junction capacitance	$C_j$	$V_R = 0\ \text{V}, f = 1\ \text{MHz}$			5	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 30\ \text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$			50	ns

### ■ Marking

NO.	BAV23A	BAV23C	BAV23S
Marking	KT7	KT6	KL31

■ Typical Characteristics

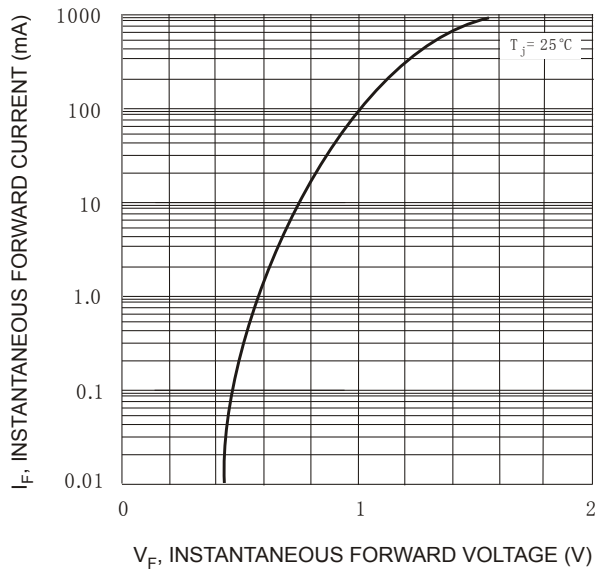


Fig. 1 Forward Characteristics

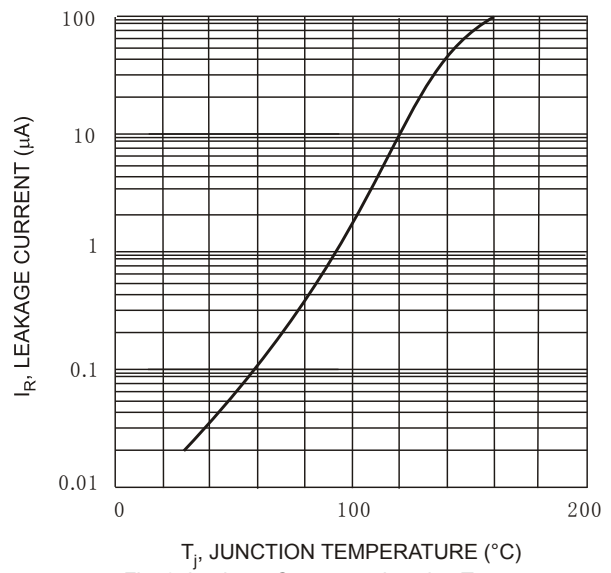
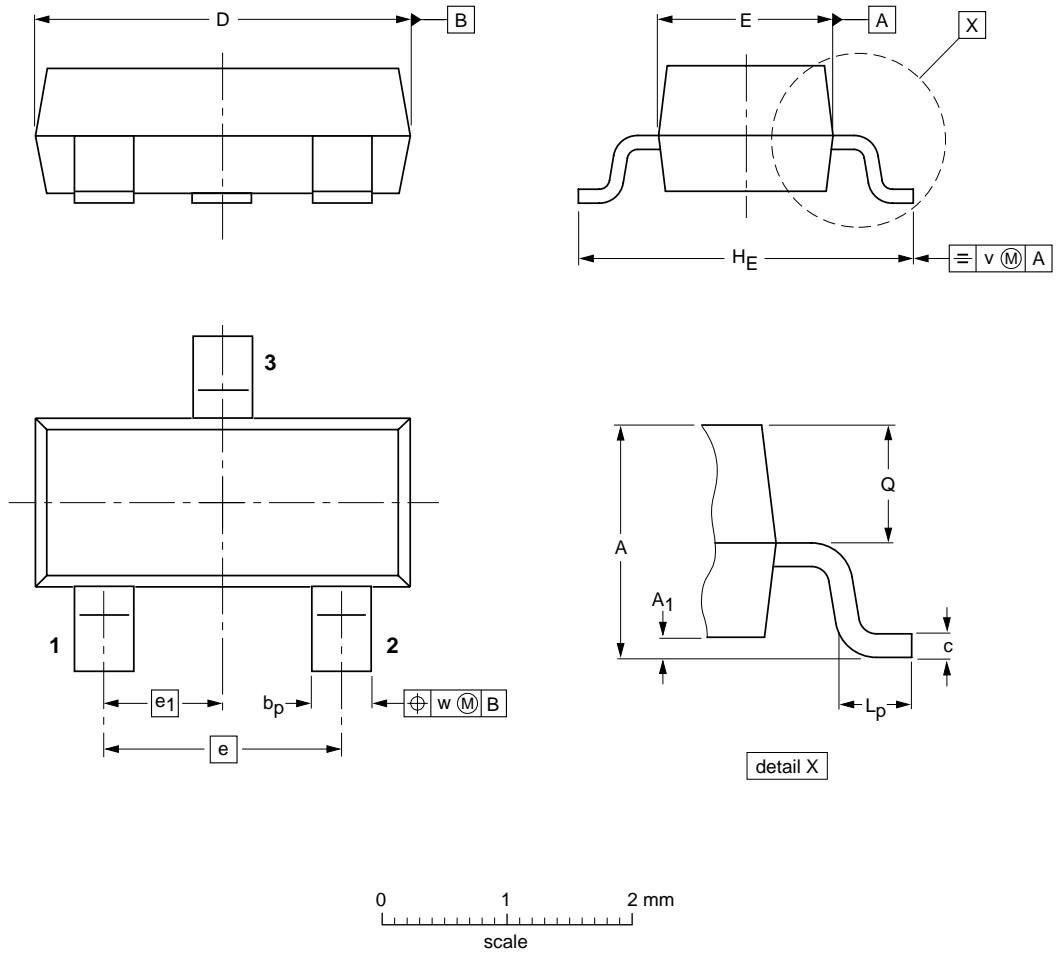


Fig. 2 Leakage Current vs Junction Temperature

## ■ SOT-23



**DIMENSIONS (mm are the original dimensions)**

UNIT	A	A <sub>1</sub> max.	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1