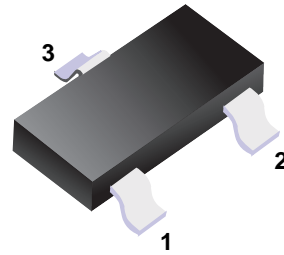


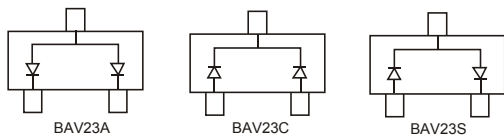
## ■ Switching Diodes

### Features

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



■ Simplified outline(SOT-23)



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit	
Reverse Voltage	V <sub>RRM</sub>	250	V	
Working Peak Reverse Voltage	V <sub>RWM</sub>	200		
DC Blocking Voltage	V <sub>R</sub>	200		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	141		
Forward Continuous Current	I <sub>FM</sub>	400	mA	
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	t=1us	9	A
		t=100us	3	
		t=10ms	1.7	
Repetitive Peak Forward Surge Current	I <sub>FRM</sub>	625	mA	
Power Dissipation	P <sub>d</sub>	350	mW	
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	357	°C/W	
Junction Temperature	T <sub>J</sub>	150	°C	
Storage Temperature range	T <sub>stg</sub>	-65 to 150		

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 100 uA	250			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 100 mA			1	
		I <sub>F</sub> = 200 mA			1.25	
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> = 200 V , T <sub>J</sub> = 25°C			100	nA
		V <sub>R</sub> = 200 V , T <sub>J</sub> = 150°C			100	uA
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 0 V, f= 1 MHz			5	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =30mA, I <sub>rr</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω			50	ns

### ■ Marking

NO.	BAV23A	BAV23C	BAV23S
Marking	KT7	KT6	KL31

■ Typical Characteristics

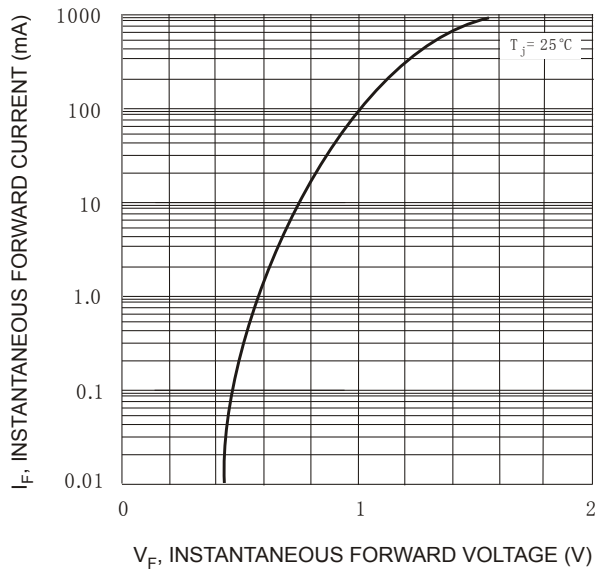


Fig. 1 Forward Characteristics

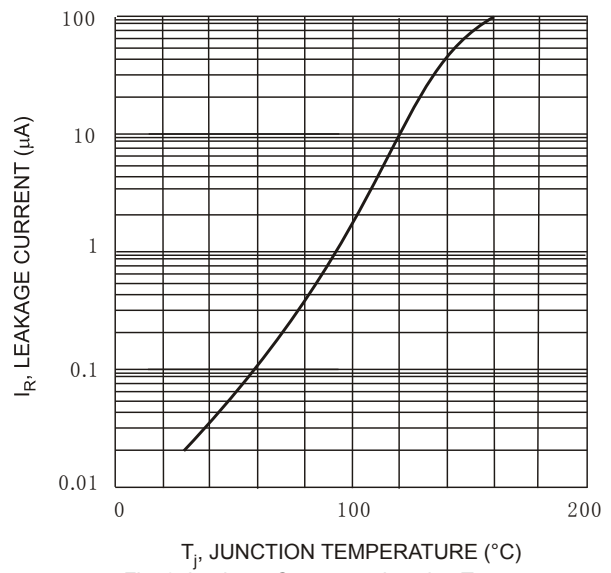
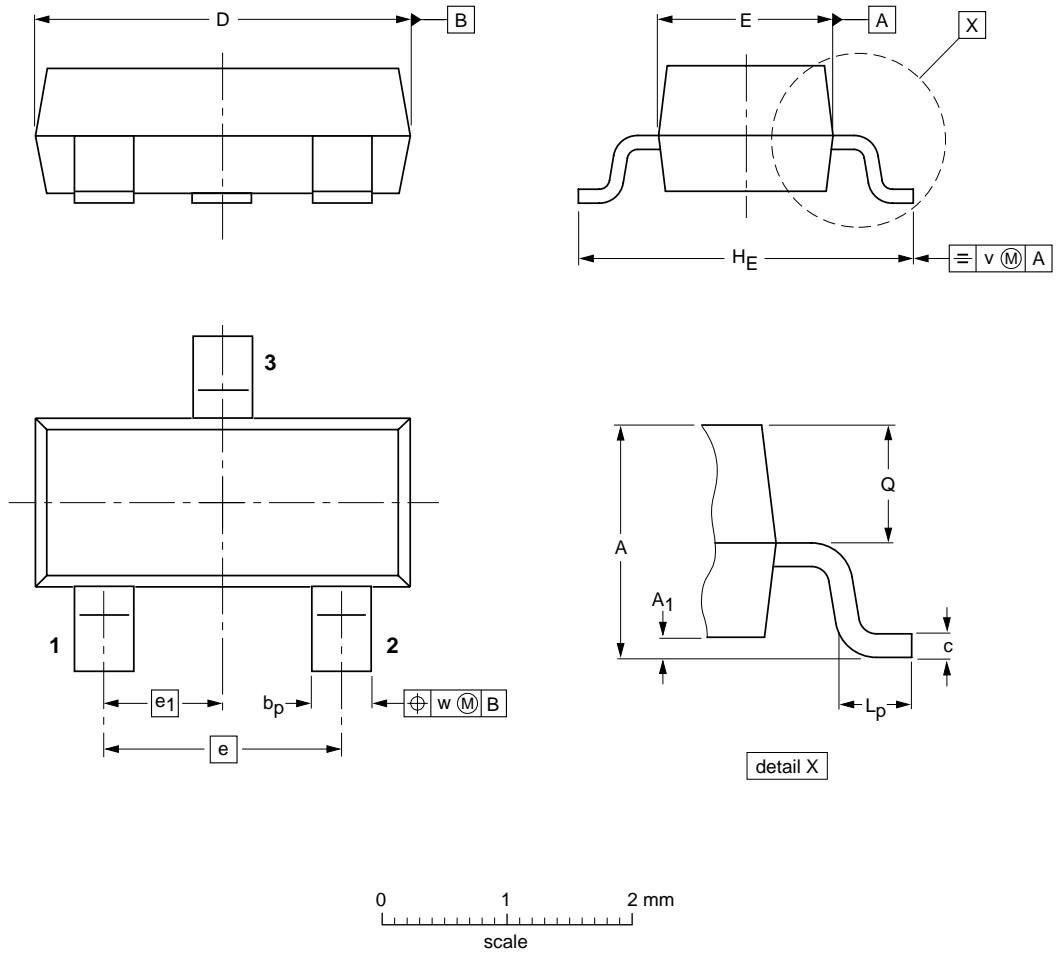


Fig. 2 Leakage Current vs Junction Temperature

## ■ 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