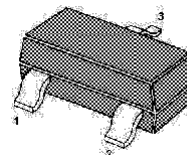


BAV23A/C/S

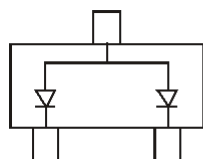
SURFACE MOUNT SWITCHING DIODE

Features

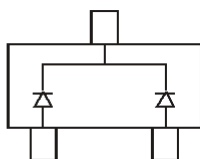
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



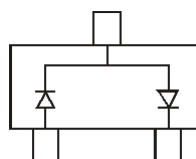
SOT-23 Plastic Package



BAV23A Marking: KT7



BAV23C Marking: KT6



BAV23S Marking: KL31

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage	V_{RWM}	200	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current	I_{FM}	400	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu\text{s}$ @ $t = 100\mu\text{s}$ @ $t = 10\text{ms}$	I_{FSM}	9.0	A
		3.0	
		1.7	
Repetitive Peak Forward Surge Current	I_{FRM}	625	mA
Power Dissipation (Note 2)	P_d	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage (Note 1)	V_F	—	1.0	V	$I_F = 100\text{mA}$
			1.25		$I_F = 200\text{mA}$
Reverse Current @ Rated DC Blocking Voltage (Note 1)	I_R	—	100	nA μA	$T_j = 25^\circ\text{C}$
					$T_j = 150^\circ\text{C}$
Total Capacitance	C_T	—	5.0	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	50	ns	$I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Notes: 1. Short duration test pulse used to minimize self-heating effect.

Typical Characteristics

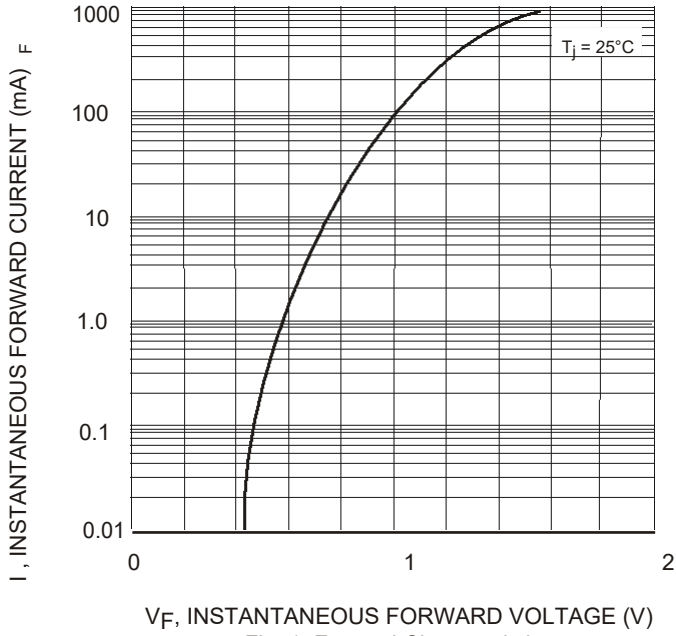


Fig. 1 Forward Characteristics

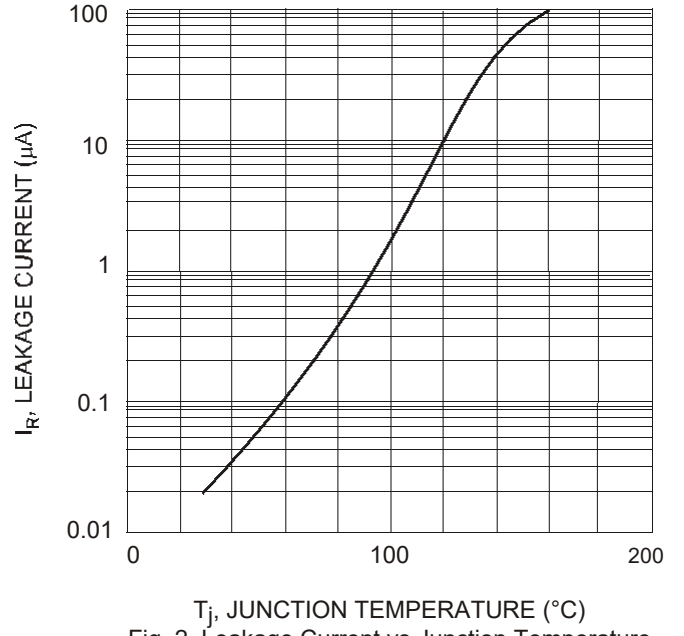


Fig. 2 Leakage Current vs Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

