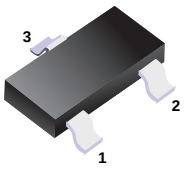
GOODWORK

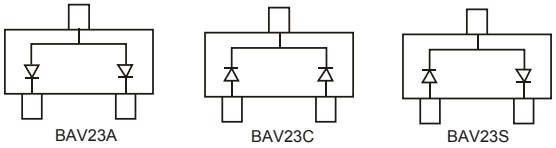
BAV23A/C/S

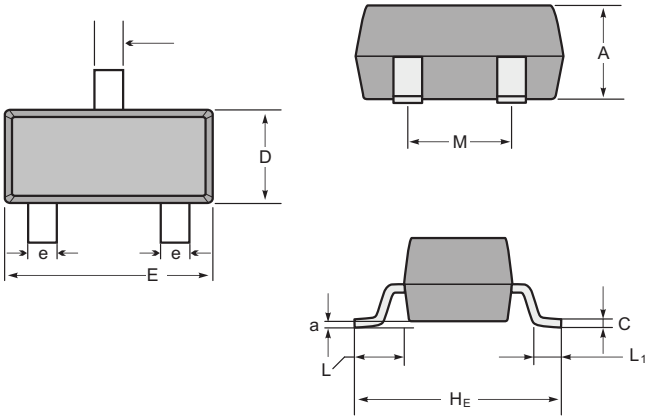
Switching Diodes



■ Features

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





SOT-23 mechanical data

UNIT		A	C	D	E	HE	e	M	L	L1	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

■ Absolute Maximum Ratings Ta = 25℃

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 (Notes 1)		I_{FM}	400	mA
Non-Repetitive Peak Forward Surge Current	t=1us	I_{FSM}	9	A
	t=100us		3	
	t=10ms		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	℃/W
Junction Temperature		T_J	150	℃
Storage Temperature range		T_{stg}	-65 to 150	

1. Double Diode Loaded in Parallel. For Single Diode or Double Diode Loaded in Series, the continuous forward current should be reduced by half.

BAV23A/C/S

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	I_R= 100 uA	250			V
Forward voltage	V_F	I_F= 100 mA			1	
		I_F= 200 mA			1.25	
Reverse voltage leakage current	I_R	V_R= 200 V , T_J = 25℃			100	nA
		V_R= 200 V , T_J = 150℃			100	uA
Junction capacitance	C_j	V_R= 0 V, f= 1 MHz			5	pF
Reverse recovery time	t_{rr}	I_F=I_R=30mA,Irr=0.1xI_R, R_L=100Ω			50	ns

■ Marking

NO.	BAV23A	BAV23C	BAV23S
Marking	KT7	KT6	KL31

RATING AND CHARACTERISTIC CURVES (BAV23A/C/S)

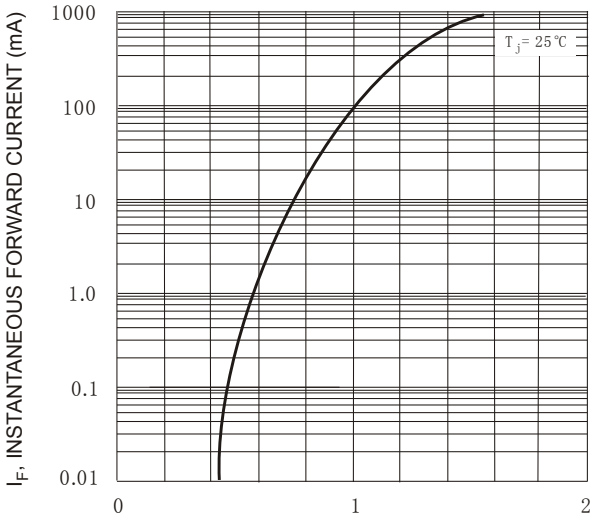


Fig. 1 Forward Characteristics

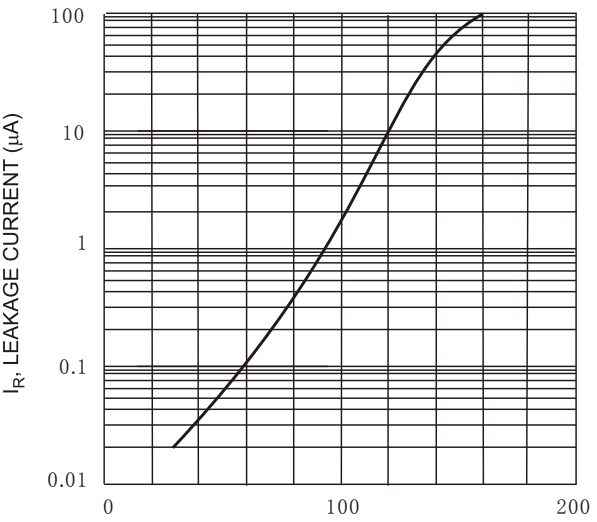


Fig. 2 Leakage Current vs Junction Temperature