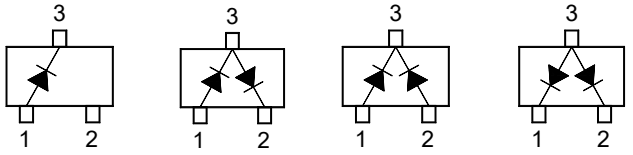
BAV23 / SE / CC / CA

Silicon Epitaxial Planar Diodes

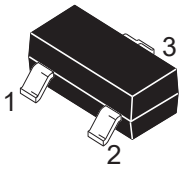
Features

High voltage switching diode

BAV23 BAV23SE BAV23CC BAV23CA



SOT-23



BAV23	Marking: **HC**
BAV23SE	Marking: **PY**
BAV23CC	Marking: **PZ**
BAV23CA	Marking: **RA**

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Units
Maximum Repetitive Reverse Voltage		V_{RRM}	250	V
Reverse Voltage		V_R	200	V
Forward Current		$I_{F(AV)}$	400	mA
Repetitive Peak Forward Current		I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	at t = 10 ms at t = 100 µs at t = 1 µs	I_{FSM}	1.7 3 9	A
Power Dissipation		P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air		$R_{\theta JA}$	357	°C/W
Operating Junction and Storage Temperature Range		T_j, T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	250	-	V
Forward Voltage at I_F = 100 mA at I_F = 200 mA	V_F	- -	1 1.25	V
Reverse Current at V_R = 200 V, T_j = 25 °C at V_R = 200 V, T_j = 150 °C	I_R	- -	100 100	nA µA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	-	5	pF
Reverse Recovery Time at I_F = I_R = 30 mA, I_{rr} = 0.1 X I_R, R_L = 100 Ω	t_{rr}	-	50	ns

Rating and Characteristics Curves

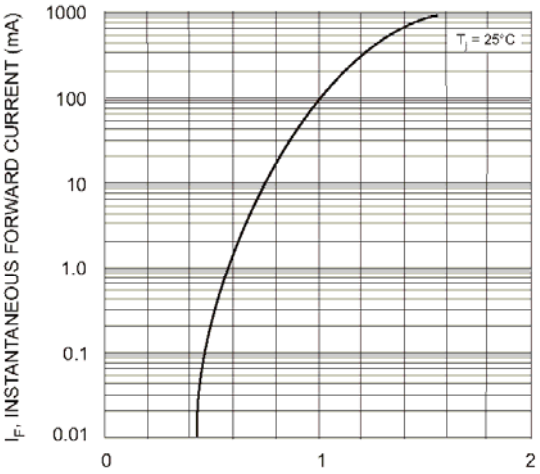


Fig. 1 Forward Characteristics

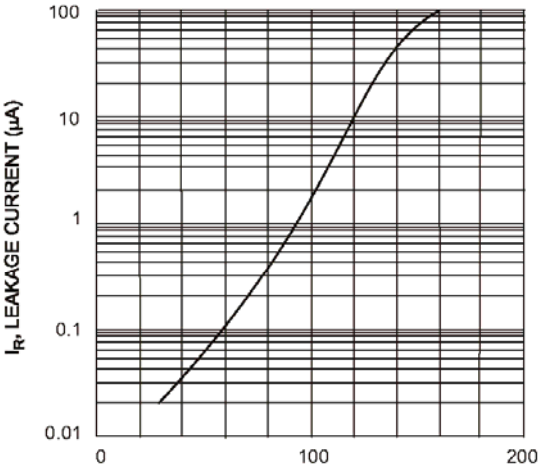
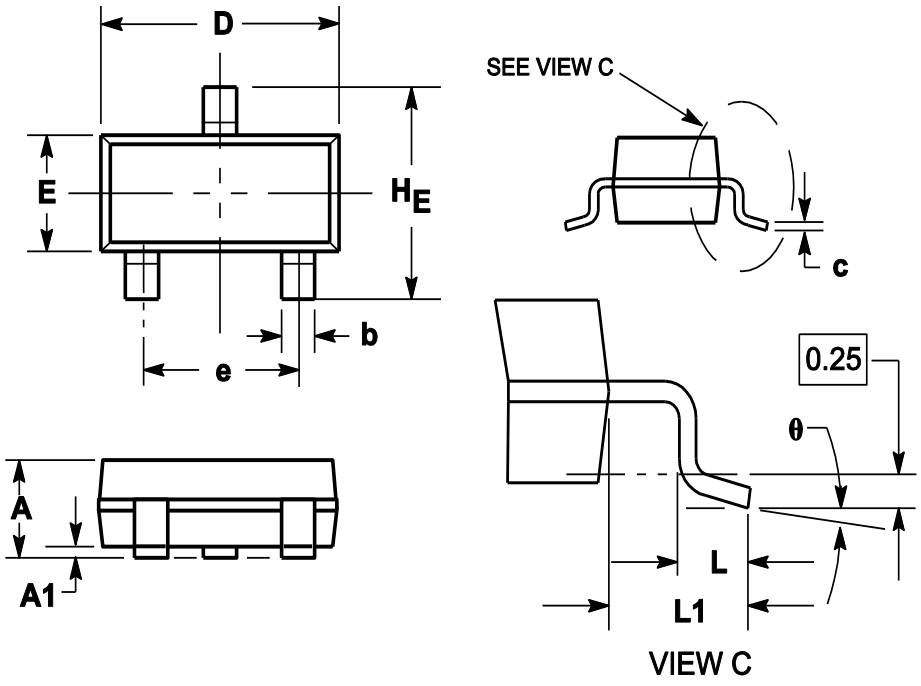


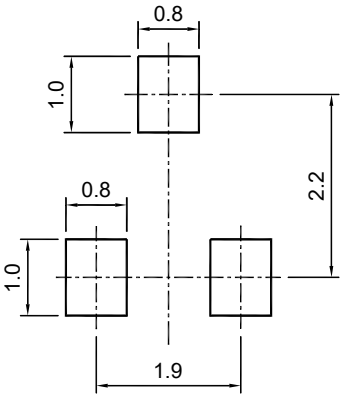
Fig. 2 Leakage Current vs Junction Temperature

Package Outline

SOT-23



Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.900	1.025	1.150
A1	0.000	0.050	0.100
b	0.300	0.400	0.500
c	0.080	0.115	0.150
D	2.800	2.900	3.000
E	1.200	1.300	1.400
H_E	2.250	2.400	2.550
e	1.800	1.900	2.000
L1	0.550REF		
L	0.300		0.500
θ	0^o		8^o



SOT-23 (TO-236)

Recommended soldering pad

Ordering Informatiom

Device	Package	Shipping
BAV23 Series	SOT-23	3000/Reel&Tape(7inch)