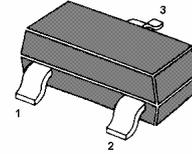
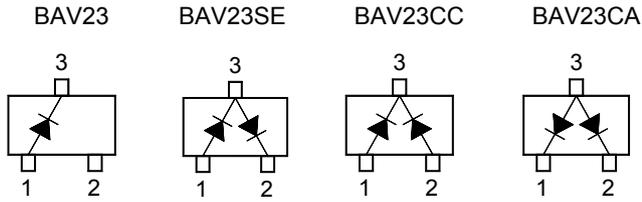


BAV23 / SE / CC / CA

SURFACE MOUNT SWITCHING DIODES



SOT-23 Plastic Package

BAV23SE Marking Code: **PY**

BAV23CC Marking Code: **PZ**

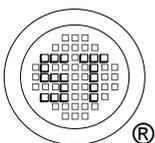
BAV23CA Marking Code: **RA**

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	250	V
Reverse Voltage	V_R	200	V
Forward Current	I_F	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current at $t = 1\ \mu\text{s}$ at $t = 100\ \mu\text{s}$ at $t = 10\ \text{ms}$	I_{FSM}	9 3 1.7	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_j, T_s	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25\text{ }^\circ\text{C}$ unless otherwise specified)

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



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7116
ISO 9001:2000 Certificate No. 0506098

Dated : 04/07/2006

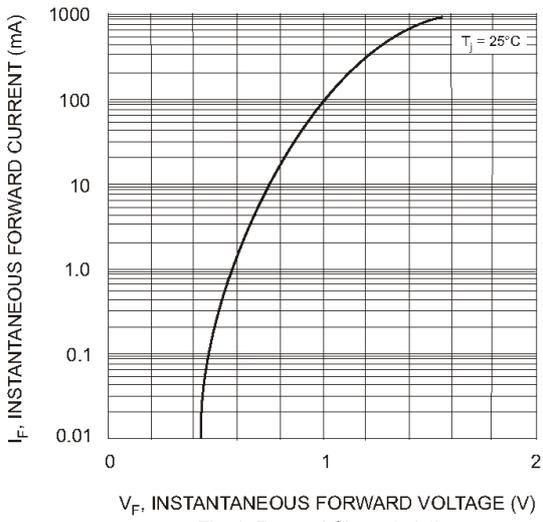


Fig. 1 Forward Characteristics

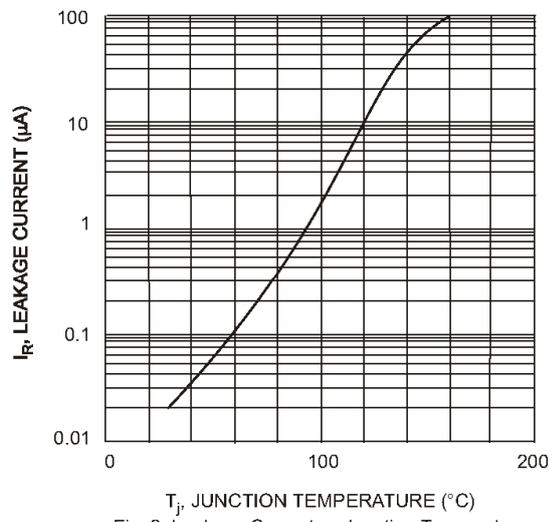
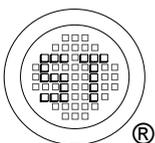


Fig. 2 Leakage Current vs Junction Temperature



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