

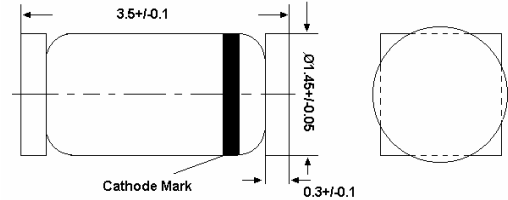
BAV200~BAV203

SILICON EPITAXIAL PLANAR DIODES

Switching Diode

Applications:
General Purposes

LS-34



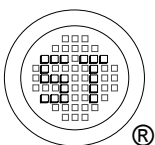
QuadromELF
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RRM}	BAV200	60
		BAV201	120
		BAV202	200
		BAV203	250
Reverse Voltage	V_R	BAV200	50
		BAV201	100
		BAV202	150
		BAV203	200
Forward Current	I_F	250	mA
Forward Peak Current (at $f = 50\text{ Hz}$)	I_{FM}	625	mA
Peak Forward Surge Current (at $t_p = 1\text{ s}$)	I_{FSM}	1	A
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_S	- 65 to + 175	$^\circ\text{C}$

Maximum Thermal Resistance at $T_j = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient at on PC board 50 mm X 50 mm X 1.6 mm	R_{thJA}	500	K/W



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. 0506088

Dated : 12/01/2007

BAV200~BAV203

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	-	-	1	V
Reverse Current at $V_R = 50\text{ V}$ at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$	I_R	-	-	100	nA
	BAV200	-	-	100	nA
	BAV201	-	-	100	nA
	BAV202	-	-	100	nA
	BAV203	-	-	100	nA
Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)}$	60	-	-	V
	BAV200	60	-	-	V
	BAV201	120	-	-	V
	BAV202	200	-	-	V
	BAV203	250	-	-	V
Differential Forward Resistance at $I_F = 10\text{ mA}$	r_f	-	5	-	Ω
Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_D	-	1.5	-	pF
Reverse Recovery Time at $I_F = 30\text{ mA}, I_R = 30\text{ mA}, I_R = 3\text{ mA}, R_L = 100\text{ }\Omega$	t_{rr}	-	-	50	ns

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

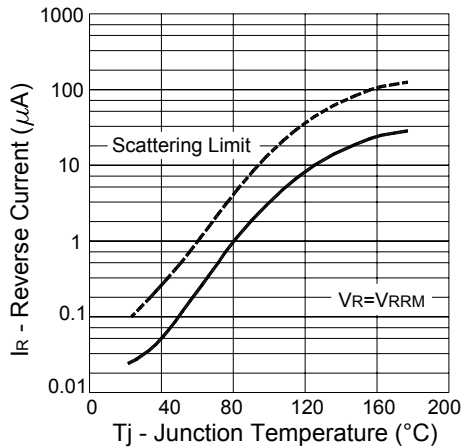


Fig 1. Reverse Current vs. Junction Temperature

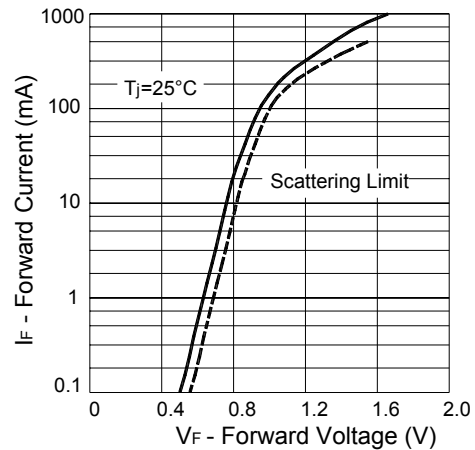
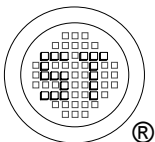


Fig 2. Forward Current vs. Forward Voltage



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. 0506088