

# BAV23 / SE / CC / CA Silicon Epitaxial Planar Diodes

#### **Features**

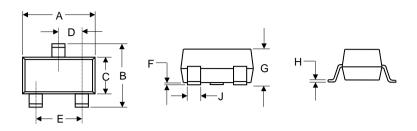
\* High voltage switching diode

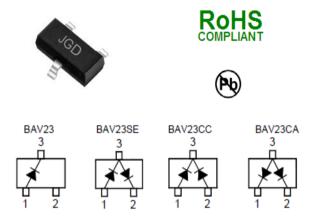
\* BAV23 Marking Code: HC

\* BAV23SE Marking Code: PY

\* BAV23CC Marking Code: PZ

\* BAV23CA Marking Code: RA





SOT-23						
DIM	INCHES		MM			
	MIN	MAX	MIN	MAX		
Α	0.110	0.120	2.80	3.04		
В	0.087	0.102	2.20	2.60		
С	0.047	0.055	1.20	1.40		
D	0.035	0.04	0.89	1.02		
E	0.070	0.080	1.78	2.04		
F		0.004		0.10		
G	0.035	0.047	0.89	1.20		
Н	0.003	0.008	0.08	0.19		
J	0.015	0.02	0.37	0.51		

### Maximum Ratings (T<sub>A</sub>=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	Vrrm	250	V
Reverse Voltage	VR	200	V
Forward Current	lf(AV)	400	mA
Repetitive Peak Forward Current	IFRM	625	mA
Non-repetitive Peak Forward Surge Current at t = 10 ms at t = 100 µs at t = 1 µs	Ігэм	1.7 3 9	А
Power Dissipation	Ptot	350	mW
Thermal Resistance Junction to Ambient Air	Reja	357	°C/W
Operating Junction and Storage Temperature Range	T <sub>j</sub> / T <sub>stg</sub>	- 65 to + 150	$^{\circ}$

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#### Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I <sub>R</sub> = 100 μA	V <sub>(BR)R</sub>	250	-	٧
Forward Voltage at IF = 100 mA at IF = 200 mA	VF		1 1.25	V
Reverse Current at $V_R = 200 \text{ V}$ , $T_j = 25 ^{\circ}\text{C}$ at $V_R = 200 \text{ V}$ , $T_j = 150 ^{\circ}\text{C}$	lr	1 1	100 100	nΑ μΑ
Total Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	Ctot	1	5	pF
Reverse Recovery Time at IF = IR = 30 mA, Irr = 0.1 X IR, RL = $100 \Omega$	trr	-	50	ns

### **Ratings and Characteristic Curves**

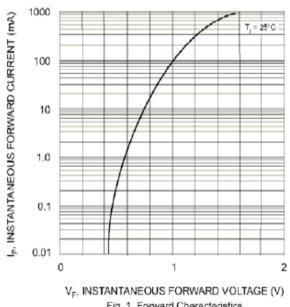
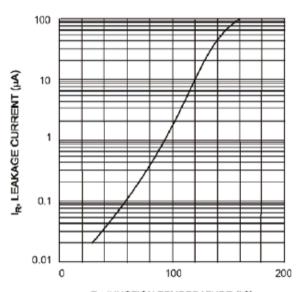


Fig. 1 Forward Characteristics



T<sub>j</sub>, JUNCTION TEMPERATURE (°C) Fig. 2 Leakage Current vs Junction Temperature

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#### **Ordering Information**

Part No.	Package	Packing Code	Packing
BAV23 / SE / CC / CA	SOT-23	R30	3000pcs/Reel

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