



**FUKUCOM COMPANY LTD.**

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

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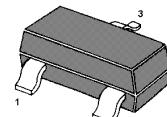
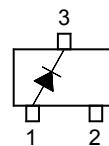
## BAS116

### Silicon Epitaxial Planar Diode

Low leakage switching diode

#### Features

- Plastic SMD package
- Low leakage current



Marking Code: JV  
SOT-23 Plastic Package

#### Application

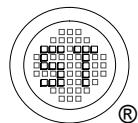
- Low leakage current applications in surface mounted circuits.

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V
Continuous Reverse Voltage	$V_R$	75	V
Continuous Forward Current	$I_F$	215	mA
Repetitive Peak Forward Current	$I_{FRM}$	500	mA
Non-Repetitive Peak Forward Surge Current $t = 1 \mu\text{s}$ $t = 1 \text{ ms}$ $t = 1 \text{ s}$	$I_{FSM}$	4 1 0.5	A
Power Dissipation	$P_{tot}$	250	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	$V_F$	0.9 1 1.1 1.25	V
Reverse Current at $V_R = 75 \text{ V}$ at $V_R = 75 \text{ V}, T_j = 150^\circ\text{C}$	$I_R$	5 80	nA
Diode Capacitance at $V_R = 0, f = 1 \text{ MHz}$	$C_d$	2	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}, R_L = 100 \Omega, i_{rr} = 0.1 I_R$	$t_{rr}$	3	$\mu\text{s}$



Dated : 15/06/2009



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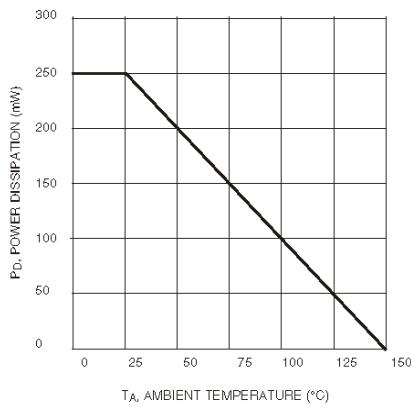


Fig. 1 Power Derating Curve

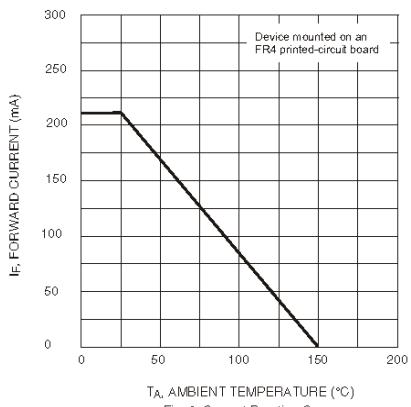


Fig. 2 Current Derating Curve

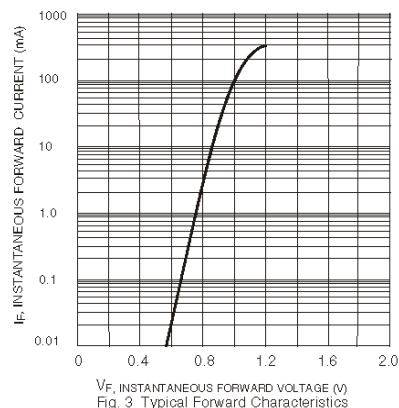


Fig. 3 Typical Forward Characteristics

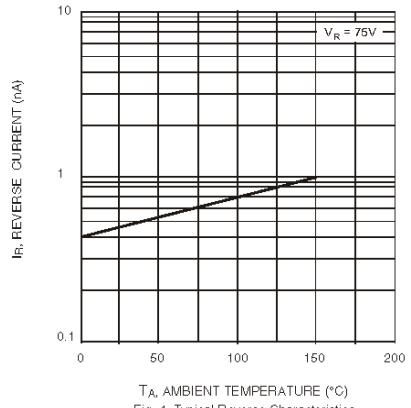
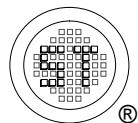


Fig. 4 Typical Reverse Characteristics



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