

BAS116

Silicon Epitaxial Planar Diode

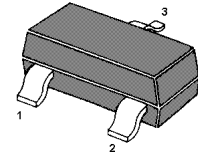
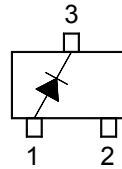
Low leakage switching diode

Features

- Plastic SMD package
- Low leakage current

Application

- Low leakage current applications in surface mounted circuits.



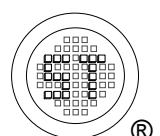
Marking Code: **JV**
TO-236 Plastic Package

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	I_{FSM}	4 1 0.5	A
	$t = 1\ \mu\text{s}$ $t = 1\ \text{ms}$ $t = 1\ \text{s}$		
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	Typ.	Max.	Unit
Forward Voltage				
at $I_F = 1\ \text{mA}$	V_F	-	0.9	V
at $I_F = 10\ \text{mA}$	V_F	-	1	V
at $I_F = 50\ \text{mA}$	V_F	-	1.1	V
at $I_F = 150\ \text{mA}$	V_F	-	1.25	V
Reverse Current				
at $V_R = 75\ \text{V}$	I_R	-	5	nA
at $V_R = 75\ \text{V}$, $T_j = 150^\circ\text{C}$		-	80	
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	μs



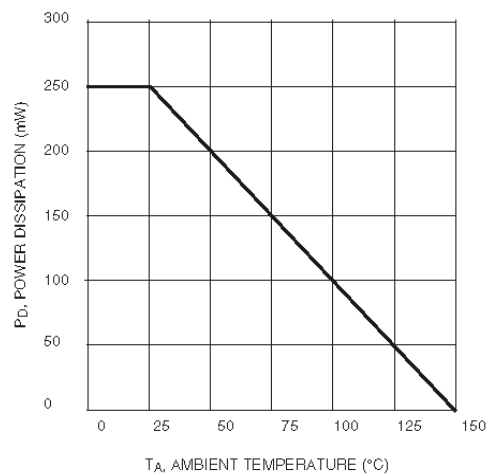


Fig. 1 Power Derating Curve

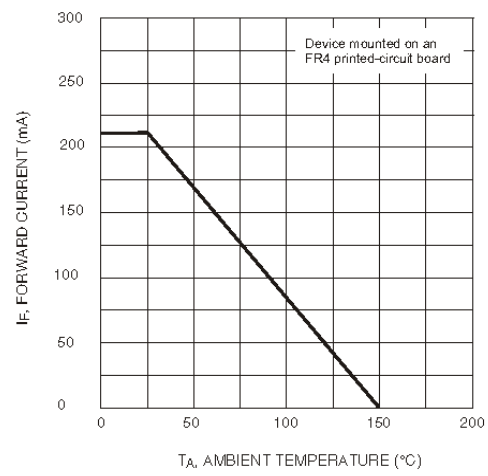


Fig. 2 Current Derating Curve

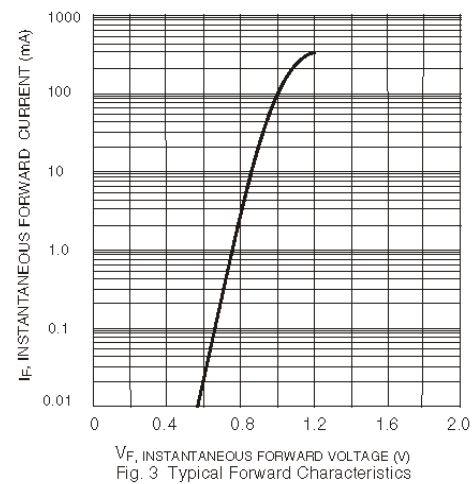


Fig. 3 Typical Forward Characteristics

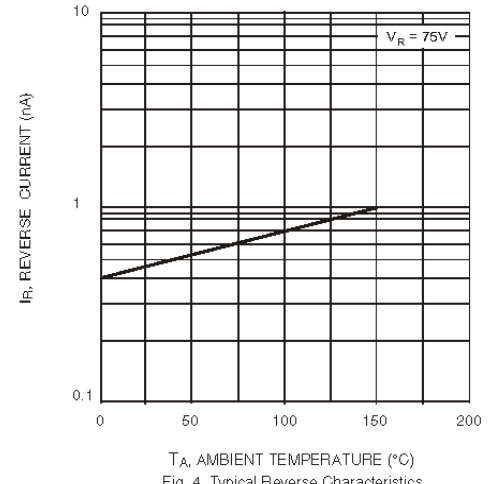


Fig. 4 Typical Reverse Characteristics

